List of Reserved Targets sent to GRANTECAN for the exploitation of the MEGARA Guaranteed Time at GTC

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1. MEGADES – MEGARA GALAXY DISKS EVOLUTION SURVEY: S4G

Rationale: The objective of the MEGARA survey is to study the stellar populations, chemical abundances and velocity ellipsoids of a sample of nearby galaxies from the S4G sample. All six LR VPHs will be used for all targets (for stellar populations and chemical abundances) in the list above plus the HR-R VPHs (for SFR and gas kinematics measurements). In the case of the objects marked in grey we will also obtain MR-G and HR-I data (for stellar kinematics).

Galaxy	RA (J2000)	Dec (J2000)	Morp. Type	D25	b/a	PA	B_T	MB	v_{rad}	Other data
	(degrees)	(degrees)		(arcmin)		(degrees)	(mag)	(mag)	(km s^{-1})	
UGC00099	2.669850	13.709440	8.8	2.51	1.00	-99.0	14.65	-17.7	1740	UV
NGC0157	8.694150	-8.396300	4.0	3.72	0.51	28.1	11.07	-21.4	1671	UV
ESO541-004	14.741700	-18.742640	4.2	2.95	0.46	25.4	13.30	-19.5	2000	UV
NGC0337	14.958750	-7.577940	6.7	2.95	0.65	-99.0	12.01	-20.6	1650	Ha UV
NGC0337A	15.390750	-7.587710	7.9	2.63	0.66	8.0	12.90	-18.6	1075	UV
NGC0428	18.232050	0.981560	8.6	2.82	0.74	113.2	11.95	-19.4	1154	Ha UV SDSS
NGC0450	18.876750	-0.860970	5.9	2.95	0.66	75.1	12.73	-19.7	1761	Ha UV SDSS
NGC0470	19.936800	3.409940	3.1	2.88	0.56	155.6	12.54	-20.6	2372	Ha UV
NGC0474	20.027850	3.415250	-2.0 (E)	2.63	0.91	-99.0	12.38	-20.4	2372	UV
UGC00891	20.329500	12.411670	8.8	2.75	0.48	47.0	14.68	-15.9	643	Ha
NGC0514	21.016200	12.917330	5.2	3.47	0.71	105.0	12.30	-20.9	2471	UV
NGC0584	22.836450	-6.868060	-4.6 (E)	3.80	0.66	104.5	11.33	-20.9	1796	Ha UV
NGC0600	23.272050	-7.311400	6.9	2.63	0.98	-99.0	13.02	-19.2	1842	UV
UGC01133	23.761800	4.381300	9.9	3.47	0.51	-99.0	14.33	-18.6	1964	UV
UGC01176	25.041300	15.904600	9.9	3.89	0.79	-99.0	14.40	-15.9	632	Ha UV
PGC006667	27.292950	-10.061240	6.7	2.75	0.79	129.6	14.09	-18.4	1992	SDSS
NGC0681	27.295200	-10.426620	1.9	2.51	0.72	67.5	12.77	-19.4	1757	SDSS
NGC0691	27.673800	21.759890	4.0	2.69	0.69	91.6	12.28	-21.3	2663	Ha UV
UGC01551	30.906150	24.075500	6.1	2.63	0.56	107.5	13.89	-20.0	2671	UV

PGC007900	31.130850	-6.198900	8.9	3.09	0.41	91.5	14.59	-17.6	1363	UV
NGC0864	33.864750	6.001990	5.1	3.72	0.69	24.0	11.62	-20.6	1561	Ha UV SDSS
NGC0895	35.400900	-5.520560	5.9	3.31	0.68	111.8	12.30	-20.6	2288	Ha UV
NGC0918	36.461250	18.496400	5.2	3.09	0.56	159.3	13.07	-20.6	1509	Ha
NGC1022	39.636300	-6.677390	1.1	2.57	0.58	67.6	12.11	-19.7	1453	Ha UV SDSS
NGC1042	40.099950	-8.433720	6.0	3.89	0.55	6.3	11.64	-20.2	1370	Ha UV SDSS
NGC1052	40.269750	-8.255440	-4.7 (E)	2.95	0.71	109.0	11.44	-20.2	1472	UV SDSS
NGC1073	40.917750	1.375800	5.3	3.55	0.63	31.6	11.68	-19.9	1208	Ha UV
NGC1084	41.499600	-7.578570	4.9	3.31	0.66	35.5	11.19	-20.6	1409	UV SDSS
NGC1087	41.604900	-0.498680	5.2	2.95	0.60	12.0	11.52	-20.6	1520	Ha UV SDSS
NGC1090	41.641350	-0.247030	3.7	3.31	0.44	101.0	12.60	-21.0	2758	Ha UV SDSS
UGC02345	42.969600	-1.172100	8.7	2.82	1.00	-99.0	14.30	-17.6	1506	Ha UV SDSS
NGC1179	45.660150	-18.897730	5.9	3.63	0.68	43.1	12.67	-19.6	1777	Ha UV
NGC1357	53.321250	-13.664140	2.0	3.39	0.76	76.0	12.40	-20.1	2019	UV
NGC1637	70.367400	-2.857640	5.0	3.16	0.87	16.3	11.56	-18.4	715	Ha
NGC2541	123.667050	49.061580	6.0	3.02	0.51	169.9	12.25	-18.6	559	SDSS
NGC2552	124.834200	50.008800	8.9	2.95	0.54	53.7	12.69	-18.0	518	Ha UV SDSS
NGC2681	133.386000	51.313100	0.4	3.89	1.00	-99.0	11.15	-19.4	676	Ha UV SDSS
NGC2655	133.911900	78.223680	0.1	3.89	0.52	16.0	10.98	-21.2	1384	Ha UV
NGC2712	134.876850	44.914000	3.1	2.88	0.54	4.3	12.78	-20.0	1819	Ha SDSS
NGC2742	136.889700	60.479280	5.3	3.02	0.52	88.3	12.07	-20.3	1295	Ha UV SDSS
NGC2748	138.429300	76.475330	4.0	2.69	0.43	39.3	12.39	-20.5	1470	UV
NGC2782	138.521700	40.112930	1.1	3.24	0.74	-99.0	12.32	-20.9	2557	Ha UV SDSS
IC0529	139.636350	73.760020	5.2	3.24	0.48	141.8	12.60	-20.8	2259	UV
NGC2787	139.829850	69.203400	-1.1 (E)	3.24	0.56	113.5	11.60	-19.6	699	Ha UV
NGC2805	140.084850	64.102880	6.9	3.39	0.81	174.1	11.79	-20.8	1734	Ha UV SDSS
NGC2859	141.077250	34.513360	-1.2 (E)	3.16	0.87	85.0	11.87	-20.3	1687	UV SDSS

UGC05139	145.134750	71.182080	9.9	3.31	0.95	-99.0	13.37	-99.0	140	Ha UV
NGC2974	145.635300	-3.701770	-4.7 (E)	3.47	0.62	41.0	11.80	-20.6	1890	UV
NGC2964	145.726800	31.847030	4.1	2.95	0.74	97.0	12.04	-19.8	1317	UV SDSS
NGC2968	145.800000	31.928730	1.6	2.57	0.66	54.0	12.73	-19.5	1526	UV SDSS
NGC2985	147.592350	72.279080	2.3	3.63	0.81	175.5	11.21	-20.8	1323	Ha UV
NGC3041	148.279800	16.677670	5.4	3.09	0.65	92.7	12.30	-19.8	1412	SDSS
NGC3104	150.987900	40.755750	9.9	3.02	0.68	35.0	13.79	-16.8	603	Ha SDSS
NGC3227	155.877450	19.864940	1.4	3.98	0.47	156.5	11.55	-20.1	1147	Ha SDSS
UGC05612	156.027750	70.882200	7.9	2.63	0.63	154.0	12.77	-19.2	1010	UV
NGC3239	156.270150	17.163630	9.8	3.63	0.76	-99.0	11.67	-19.1	752	Ha UV SDSS
UGC05688	157.603500	70.050400	8.8	3.09	0.59	145.0	13.81	-19.2	1921	Ha UV
NGC3294	159.067650	37.324590	5.2	3.09	0.52	117.6	12.14	-20.4	1573	UV SDSS
IC0630	159.640650	-7.170420	-1.9 (E)	3.24	0.79	150.0	12.98	-19.7	2183	UV
NGC3319	159.789600	41.686780	5.9	3.63	0.49	34.7	11.77	-19.4	742	Ha UV SDSS
NGC3346	160.912050	14.871930	6.0	2.63	0.83	104.2	12.45	-19.2	1262	UV SDSS
NGC3389	162.116400	12.533130	5.3	2.63	0.45	102.9	12.51	-19.7	1303	UV SDSS
UGC05918	162.403350	65.531000	10.0	2.51	0.98	-99.0	15.14	-99.0	339	Ha UV SDSS
NGC3396	162.479250	32.990970	9.4	3.09	0.41	98.5	12.43	-20.4	1660	UV SDSS
NGC3423	162.809700	5.840070	6.0	3.55	0.85	1.7	11.60	-19.5	1012	UV SDSS
NGC3414	162.817650	27.974940	-2.0 (E)	2.69	0.51	9.3	12.06	-19.8	1414	UV SDSS
NGC3433	163.015950	10.148220	5.2	2.51	0.95	-99.0	13.09	-20.1	2719	UV SDSS
NGC3430	163.047600	32.951230	5.1	3.98	0.56	32.3	12.19	-20.3	1584	UV SDSS
NGC3447	163.350000	16.772440	8.8	3.39	0.58	25.6	14.44	-17.2	1070	UV SDSS
NGC3489	165.077400	13.901250	-1.3 (E)	3.39	0.59	70.0	11.06	-19.2	708	UV SDSS
NGC3507	165.855750	18.135330	3.1	2.88	0.85	-99.0	12.09	-19.1	979	Ha UV SDSS
NGC3556	167.879100	55.674010	6.0	3.98	0.42	79.0	10.70	-20.7	697	Ha UV SDSS
NGC3596	168.775950	14.787110	5.1	3.55	0.95	-99.0	11.79	-19.6	1192	SDSS

NGC3608	169.245600	18.148530	-4.8 (E)	2.95	0.83	80.0	11.57	-19.7	1108	UV SDSS
NGC3619	169.838700	57.758360	-0.8 (E)	3.89	0.79	-99.0	12.53	-19.6	1540	UV SDSS
NGC3626	170.015850	18.356780	-0.7 (E)	2.95	0.66	156.3	11.80	-20.1	1476	UV SDSS
NGC3631	170.265300	53.171030	5.2	3.72	0.83	118.0	10.71	-21.0	1163	Ha UV SDSS
NGC3672	171.260250	-9.795390	5.0	2.88	0.58	6.5	12.07	-20.6	1866	UV SDSS
NGC3686	171.933150	17.224060	4.1	3.02	0.76	22.7	12.00	-19.6	1157	UV SDSS
NGC3729	173.455950	53.124780	1.3	2.88	0.72	15.0	11.72	-19.7	1012	UV SDSS
NGC3755	174.139050	36.410280	5.2	2.88	0.40	123.4	13.69	-19.1	1568	UV SDSS
NGC3780	174.843300	56.270760	5.2	2.69	0.83	68.2	12.12	-21.0	2390	UV SDSS
NGC3810	175.244850	11.471110	5.2	3.31	0.68	31.6	11.27	-20.1	994	Ha UV SDSS
NGC3887	176.769000	-16.854640	3.9	3.63	0.79	9.5	11.41	-20.0	1208	UV
NGC3892	177.004050	-10.962000	-1.0 (E)	3.02	0.87	98.2	12.69	-19.4	1746	
NGC3893	177.159900	48.709500	5.1	2.69	0.52	161.5	10.82	-20.9	970	Ha UV SDSS
UGC06817	177.719850	38.880710	9.9	3.98	0.40	65.0	13.43	-99.0	243	Ha SDSS
NGC3930	177.940950	38.015010	5.1	2.69	0.74	29.5	13.18	-18.1	918	Ha SDSS
NGC3938	178.205100	44.121400	5.1	3.55	0.98	-99.0	10.92	-20.0	809	Ha UV SDSS
NGC3941	178.230600	36.986360	-2.0 (E)	3.63	0.66	10.0	11.27	-19.8	914	UV SDSS
NGC3981	179.026950	-19.895000	4.1	3.31	0.63	14.3	12.14	-20.2	1708	UV
UGC06917	179.119800	50.428340	8.8	2.51	0.59	130.0	13.15	-18.4	913	Ha UV SDSS
NGC3998	179.484000	55.453560	-2.1 (E)	2.75	0.81	138.3	11.41	-20.0	1040	SDSS
NGC4027	179.875500	-19.265180	7.8	3.55	0.79	162.7	11.58	-20.6	1671	
NGC4030	180.097650	-1.100050	4.0	3.80	0.71	8.6	11.23	-20.8	1462	Ha UV SDSS
NGC4045	180.676050	1.976740	1.3	2.57	0.62	89.3	12.73	-19.9	1982	Ha UV SDSS
NGC4050	180.724200	-16.373290	2.2	3.39	0.63	89.0	13.04	-19.4	1761	UV
NGC4064	181.046550	18.443440	1.3	3.24	0.41	151.7	12.25	-19.1	936	Ha UV SDSS
NGC4102	181.598850	52.710920	3.0	2.95	0.58	38.0	12.09	-19.3	844	Ha UV SDSS
NGC4116	181.902900	2.691900	7.4	2.57	0.58	155.5	12.49	-19.5	1310	Ha UV SDSS

NGC4123	182.046300	2.878260	5.0	3.16	0.72	123.7	11.93	-19.8	1328	Ha UV SDSS
NGC4138	182.374050	43.685310	-0.8 (E)	2.95	0.56	150.0	12.29	-18.7	877	UV SDSS
NGC4151	182.636100	39.405750	2.1	2.88	0.78	50.0	11.36	-20.1	999	Ha UV SDSS
NGC4203	183.770550	33.198300	-2.7 (E)	3.39	0.42	8.7	11.72	-19.6	1091	UV SDSS
NGC4212	183.914100	13.901470	4.9	2.82	0.60	73.2	11.78	-20.4	-85	Ha UV SDSS
NGC4224	184.140600	7.462110	1.0	2.88	0.40	56.3	12.89	-20.5	2598	Ha UV SDSS
NGC4242	184.375800	45.619370	7.9	3.80	0.71	20.8	11.59	-18.9	516	Ha UV SDSS
NGC4245	184.403100	29.607990	0.1	2.57	0.63	145.8	12.34	-18.7	886	Ha UV SDSS
NGC4260	184.842750	6.098710	1.0	2.51	0.46	59.1	12.69	-20.0	1958	Ha UV SDSS
NGC4267	184.939050	12.799300	-2.5 (E)	2.51	0.69	161.0	11.84	-19.3	972	UV SDSS
NGC4274	184.960350	29.614190	1.6	3.63	0.47	101.7	11.33	-20.1	927	UV SDSS
NGC4278	185.028900	29.281500	-4.8 (E)	2.88	0.98	-99.0	11.04	-19.4	621	UV SDSS
NGC4298	185.386650	14.606070	5.2	3.24	0.55	135.7	12.04	-19.8	1138	Ha UV SDSS
NGC4314	185.634000	29.894880	1.0	3.72	0.95	-99.0	11.42	-19.8	983	Ha UV SDSS
NGC4324	185.774250	5.249680	-0.7 (E)	2.88	0.41	55.0	12.50	-19.6	1662	Ha UV SDSS
NGC4371	186.230850	11.704280	-1.3 (E)	3.80	0.47	96.5	11.82	-19.1	914	UV SDSS
NGC4380	186.342150	10.016830	2.3	3.31	0.54	159.7	12.63	-18.7	970	Ha UV SDSS
NGC4393	186.463800	27.560810	6.7	3.02	0.93	-99.0	13.73	-17.0	755	Ha SDSS
NGC4394	186.481800	18.213920	2.9	3.47	0.95	-99.0	11.59	-19.4	915	Ha UV SDSS
UGC07534	186.533100	58.321800	9.9	2.51	0.79	-99.0	13.43	-17.5	723	SDSS
UGC07559	186.770100	37.144190	9.9	3.72	0.65	-99.0	14.16	-99.0	217	Ha UV SDSS
UGC07557	186.797400	7.262650	8.6	2.82	0.89	-99.0	13.48	-17.5	935	Ha UV SDSS
NGC4424	186.798750	9.420310	1.2	3.02	0.51	95.3	12.38	-99.0	437	Ha UV SDSS
UGC07577	186.923100	43.494240	9.8	3.80	0.65	130.0	12.88	-99.0	196	Ha UV SDSS
IC3392	187.180350	14.999450	2.5	2.69	0.43	39.8	13.07	-19.6	1681	Ha UV SDSS
UGC07608	187.186800	43.224760	9.9	3.47	0.89	-99.0	13.67	-16.7	536	UV SDSS
NGC4457	187.245900	3.570580	0.4	2.82	0.85	78.5	11.71	-19.1	888	Ha UV SDSS

NGC4487	187.768650	-8.053890	5.9	3.47	0.55	74.2	11.83	-19.6	1037	Ha UV
NGC4496A	187.914300	3.939500	7.5	3.39	0.83	70.0	12.12	-20.2	1730	UV SDSS
NGC4498	187.914450	16.852010	6.4	2.82	0.54	130.7	12.77	-19.7	1505	Ha UV SDSS
NGC4503	188.025750	11.176420	-1.8 (E)	3.47	0.46	11.3	12.09	-19.7	1359	Ha UV SDSS
NGC4504	188.072700	-7.563420	6.0	3.16	0.62	163.0	12.17	-19.1	998	UV
NGC4534	188.522550	35.518460	7.6	2.75	0.59	122.8	12.98	-18.2	802	UV SDSS
NGC4531	188.566200	13.075450	-0.4 (E)	3.02	0.65	155.4	12.47	-18.7	195	Ha UV SDSS
NGC4539	188.644800	18.202620	0.7	2.75	0.40	95.2	12.86	-19.1	1287	UV SDSS
NGC4546	188.872950	-3.793220	-2.7 (E)	3.24	0.56	89.7	11.35	-19.7	1050	UV
NGC4567	189.136200	11.257950	4.0	2.75	0.79	90.0	12.10	-20.9	2277	Ha UV SDSS
NGC4571	189.234900	14.217300	6.3	3.55	0.93	-99.0	11.97	-99.0	336	Ha UV SDSS
NGC4596	189.983850	10.175600	-0.9 (E)	3.89	0.83	135.0	11.44	-20.9	1870	UV SDSS
NGC4597	190.052550	-5.799170	8.6	3.55	0.40	-99.0	12.87	-18.8	1040	UV SDSS
NGC4618	190.386600	41.150910	8.6	3.55	0.65	40.2	11.31	-19.3	546	Ha UV SDSS
IC3687	190.563150	38.503200	9.9	3.31	0.69	-99.0	13.73	-99.0	355	UV SDSS
NGC4639	190.718400	13.256610	3.5	2.88	0.66	130.5	12.19	-19.1	984	Ha UV SDSS
NGC4647	190.885500	11.582480	5.2	2.75	0.85	148.5	12.09	-19.8	1396	Ha UV SDSS
NGC4651	190.927650	16.393390	5.2	3.80	0.66	76.8	11.38	-19.6	799	Ha UV SDSS
PGC043020	191.422200	-6.072530	8.9	2.51	0.71	19.5	13.02	-19.0	1476	UV SDSS
NGC4682	191.814450	-10.063440	5.8	2.57	0.46	84.3	13.12	-20.2	2335	UV SDSS
NGC4689	191.939700	13.762670	4.7	3.80	0.76	166.4	11.58	-20.7	1619	Ha SDSS
NGC4688	191.943600	4.336060	6.0	3.72	0.91	-99.0	13.51	-17.6	984	Ha UV SDSS
NGC4691	192.056700	-3.332730	0.4	3.02	0.81	15.3	11.68	-19.6	1119	Ha UV SDSS
NGC4698	192.095550	8.487470	1.4	3.80	0.41	170.0	11.55	-19.9	1008	Ha UV SDSS
NGC4781	193.597050	-10.536070	7.0	3.63	0.40	118.3	11.39	-20.8	1262	UV
UGC08041	193.802700	0.116610	6.9	3.16	0.60	169.2	13.38	-18.6	1324	Ha UV SDSS
NGC4897	195.220650	-13.449780	3.9	2.63	0.79	153.3	13.24	-19.9	2566	UV

NGC4902	195.248850	-14.513670	3.1	2.69	0.91	78.0	11.80	-21.4	2635	UV
NGC4941	196.054200	-5.551680	2.4	3.31	0.81	23.0	11.90	-19.4	1113	UV
PGC045195	196.129950	-3.572440	7.6	3.63	0.83	63.2	14.59	-17.2	1361	UV SDSS
UGC08201	196.603350	67.706800	9.9	3.31	0.51	-99.0	12.91	-99.0	34	Ha UV SDSS
NGC4981	197.203350	-6.778230	4.0	2.69	0.72	159.2	12.07	-20.2	1677	UV
NGC4984	197.238300	-15.516280	-0.8 (E)	3.31	0.74	45.0	12.20	-19.2	1206	UV
PGC045652	197.445450	-10.325470	6.7	3.55	0.95	-99.0	14.50	-16.9	1214	UV
NGC5012	197.904450	22.915440	5.2	2.63	0.55	9.8	12.79	-20.7	2612	UV SDSS
NGC5018	198.254250	-19.518560	-4.6 (E)	3.47	0.62	99.9	11.68	-21.8	2850	UV
UGC08320	198.615900	45.919900	9.9	3.39	0.39	150.0	12.74	-99.0	194	Ha UV SDSS
NGC5112	200.485200	38.734590	5.8	3.02	0.62	129.2	12.63	-18.9	968	Ha SDSS
UGC08614	204.359250	7.645100	9.8	3.39	0.52	-99.0	13.20	-18.5	1053	UV SDSS
NGC5254	204.907950	-11.493860	5.1	3.31	0.43	126.8	12.67	-20.9	2318	UV
NGC5300	207.066900	3.950900	5.2	2.82	0.65	146.2	12.90	-18.8	1173	UV SDSS
NGC5313	207.435000	39.984650	3.1	2.75	0.59	42.7	12.69	-20.7	2537	UV SDSS
NGC5334	208.226700	-1.114460	5.1	3.39	0.72	18.2	12.88	-19.1	1382	Ha UV SDSS
NGC5350	208.340100	40.363940	3.6	2.69	0.62	34.0	12.28	-20.9	2323	UV SDSS
NGC5376	208.816950	59.506620	2.3	2.57	0.62	64.8	12.89	-20.1	2016	UV SDSS
UGC08839	208.853250	17.794880	9.9	2.75	0.71	-99.0	15.48	-15.9	958	Ha UV SDSS
NGC5371	208.916400	40.461640	4.0	3.98	0.62	5.9	11.28	-22.1	2556	Ha UV SDSS
NGC5448	210.708450	49.172650	1.4	3.63	0.51	105.8	12.12	-20.8	2022	UV SDSS
NGC5426	210.853650	-6.070500	5.0	3.09	0.40	0.5	12.71	-21.0	2620	UV
NGC5427	210.858300	-6.030560	5.0	3.63	0.91	-99.0	11.96	-21.2	2729	Ha UV
NGC5576	215.265300	3.271030	-4.8 (E)	2.82	0.66	89.7	11.78	-20.1	1482	UV SDSS
NGC5584	215.599050	-0.387610	5.9	3.16	0.74	157.5	12.50	-19.8	1638	UV SDSS
NGC5660	217.457550	49.622610	5.2	2.51	0.91	75.0	12.38	-20.6	2325	UV SDSS
NGC5678	218.023350	57.921400	3.3	3.16	0.52	1.4	12.02	-20.9	1907	UV SDSS

NGC5669	218.183100	9.891710	5.9	2.57	0.58	56.7	12.73	-19.5	1370	UV SDSS
NGC5676	218.195250	49.457850	4.7	3.55	0.45	45.2	11.87	-21.5	2102	UV SDSS
NGC5719	220.234800	-0.317940	2.4	3.09	0.42	97.8	13.26	-19.5	1732	UV SDSS
NGC5728	220.599300	-17.252570	1.2	3.16	0.59	14.5	12.23	-21.5	2786	Ha UV
NGC5740	221.101800	1.679740	3.0	2.69	0.50	168.3	12.60	-19.9	1570	UV SDSS
NGC5750	221.546400	-0.222970	0.4	2.69	0.51	70.6	12.52	-19.9	1687	UV SDSS
NGC5792	224.594400	-1.090890	3.0	3.55	0.39	88.5	12.12	-21.0	1924	UV SDSS
NGC5806	225.001650	1.891270	3.1	3.02	0.54	172.5	12.35	-19.8	1354	Ha UV SDSS
NGC5850	226.782000	1.544580	3.1	3.31	0.71	114.4	11.89	-21.5	2559	Ha UV SDSS
NGC5861	227.317050	-11.321810	5.0	2.75	0.40	149.2	12.34	-20.9	1854	UV
NGC5866B	228.030000	55.784990	7.8	2.69	0.71	19.2	15.18	-16.2	842	Ha UV SDSS
NGC5892	228.450900	-15.463670	7.0	3.09	0.78	-99.0	13.27	-19.9	2285	UV
NGC5885	228.767250	-10.085820	5.0	3.09	0.85	57.7	12.34	-20.6	2000	UV
NGC5921	230.485050	5.070600	4.0	3.02	0.68	140.0	11.68	-20.6	1480	Ha UV SDSS
NGC5963	233.365800	56.559680	4.3	3.16	0.79	63.1	13.03	-17.8	655	Ha UV SDSS
NGC5964	234.401250	5.973670	6.9	3.39	0.76	147.7	13.42	-18.8	1447	Ha UV SDSS
NGC5970	234.624900	12.186200	5.0	2.75	0.69	87.8	12.00	-20.9	1957	SDSS
NGC5985	234.904500	59.331940	3.1	3.98	0.50	15.3	11.95	-21.6	2519	UV SDSS
NGC6070	242.496000	0.709610	6.0	3.47	0.52	64.0	12.42	-21.1	2008	UV SDSS
UGC10310	244.075950	47.045650	9.2	2.57	0.79	165.0	13.68	-17.3	716	Ha SDSS
NGC6207	250.765950	36.832730	4.9	3.55	0.47	17.5	11.86	-19.9	852	Ha UV SDSS
NGC6255	253.696650	36.501700	6.0	3.09	0.45	85.0	13.38	-18.4	918	Ha UV SDSS
NGC6340	257.604000	72.304330	0.4	2.57	0.95	-99.0	12.00	-19.9	1202	Ha UV SDSS
NGC7218	332.548500	-16.661740	5.6	2.57	0.42	-99.0	12.40	-20.2	1661	UV
NGC7479	346.236150	12.322860	4.3	3.63	0.74	26.6	11.73	-21.7	2381	Ha UV
UGC12709	354.349650	0.391660	8.7	2.75	0.63	153.2	14.39	-19.1	2682	UV SDSS
NGC7723	354.737400	-12.960640	3.1	3.24	0.71	41.5	11.93	-20.5	1862	UV

NGC7727	354.974400	-12.292310	1.1	3.63	0.76	-99.0	11.57	-20.8	1870	Ha UV
UGC12732	355.166550	26.236090	8.7	2.75	0.91	-99.0	14.28	-16.6	746	Ha UV
NGC7741	355.977150	26.075750	6.0	3.63	0.66	163.0	11.82	-19.3	750	Ha UV

Table 1. *List of targets for MEGARA Galaxy Disks Evolution Survey: S4G.*

Sample summary: The MEGADES-S4G sample includes a total of 215 galaxies (29 elliptical galaxiess) with 150 of them having SDSS-DR7 optical data publicly available. Galaxies that show inclinations larger than 40° and can therefore be used to determine their velocity ellipsoids are shown with white background in Table above (AOI is D25).

Setups:

LR-U, LR-B, LR-V, LR-R, LR-I, LR-Z, MR-G, HR-R: All targets (LCB & MOS)

HR-I: Targets in grey background (LCB)

2. MEGADES – MEGARA GALAXY DISKS EVOLUTION SURVEY: M33

Rationale: We aim to obtain the distribution of ionized-gas and stellar abundances (of RGBs) along with the determination of the velocity ellipsoid throughout the disk of M33.

Sample:

Name	RA(J2000)	Dec(J2000)
M33	01 33 50.9	30 39 37

Table 2. *List of targets for MEGARA Galaxy Disks Evolution Survey: M33.*

The area of interest (AOI) covers 30 arcmin (in radius) around these coordinates.

Setups:

LR-U, LR-B, LR-V, LR-R, LR-I, LR-Z, MR-G, HR-R, HR-I (LCB & MOS).

3. SPECTROSCOPIC STUDY OF COMPACT STELLAR CLUSTERS AND THEIR SURROUNDINGS IN NEARBY GALAXIES

Rationale

Compact Stellar Clusters (CSCs), often referred to as Super Stellar Clusters (SSCs), are a relatively new class of clusters that have been identified in nearby star-forming galaxies using the HST images. They are mainly characterized for their compactness, which is comparable to that of globular clusters (GCs; effective radius $r_e < 5$ pc; sub-arcsec sizes). The mass function of clusters follows a power-law form over more than 3 orders of magnitude (Whitmore et al. 1999), with the star formation rate dictating the number of clusters formed (Bastian 2008). Their masses vary from a few thousands to several millions of solar masses, with the most massive systems mainly found in starburst galaxies. Their compactness ensures that they are stable against the disrupting forces that are present in their host galaxies, for periods much longer than the open clusters. Massive-compact clusters can survive the disruptive e_ects of gravitational shocks for the Hubble time, and hence are thought to be progenitors of GCs (Fall & Zhang 2001).

We propose to observe spectroscopically a sample of galaxies containing a rich population of CSCs, with the primary goal of age-dating the clusters. The ages would be obtained by comparing the observed spectra containing characteristic absorption and/or emission lines with the spectra from population synthesis models (see e.g. Mayya, et al. 2006). The derived age distribution of clusters would help to identify major past events of star formation (Goudfrooij et al. 2001). As the interaction between galaxies is the principal driver of violent star formation, age distribution of CSCs could be used to determine the mass assembly history of the sample galaxies.

Studies of Galactic globular clusters have found evidence for the presence of more than one population of stars in them (Lee et al. 1994). These populations are found to be formed very early in the formation of a GC. The method to be adopted by us for age-dating would permit the determination of ages of all dominating populations, when more than one population is present in a SSCs. As massive SSCs are young versions of GCs, study of SSCs would help understand the early formation history of GCs.

SSCs younger than around 10 Myr are surrounded by ionized nebula which would emit their characteristic nebular spectra. These spectra would allow us to map the gaseous abundances in program galaxies. During the short Wolf-Rayet phase, the nebular spectra offer us the opportunity to study the ejecta of these stars which are enriched by the products of nucleo-synthesis (e.g. Mesa-Delgado et al. 2014).

We propose 3 sets of targets to study the above-mentioned phenomenon:

- xy sample of Compact stellar clusters using the MOS mode
- NG-LCB: Nearby galaxies with extended starburst activity using LCB mode
- WR-LCB: A sample of W-R bubble in M81 using LCB mode

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Blocked targets

#Object	RA	DEC	mode	VPHs			
NGC-628	01:36:41.747	+15:47:01.18	MOS	LR-U	LR-B	LR-V	LR-R
NGC-1569	04:30:48.48	+64:50:54.2	LCB	LR-U	LR-B	LR-V	LR-R
NGC-1300	03:19:41.08	-19:24:40.9	MOS	LR-U	LR-B	LR-V	LR-R
NGC-1309	03:22:06.56	-15:24:00.2	MOS	LR-U	LR-B	LR-V	LR-R
M81	09:55:30.647	+69:04:22.80	MOS	LR-U	LR-B	LR-V	LR-R
M81	09:55:30.647	+69:04:22.80	LCB	LR-U	LR-B	LR-V	LR-R
M82	09:55:52.10	+69:40:46.0	LCB	LR-U	LR-B	LR-V	LR-R
NGC-3627	11:20:14.964	+12:59:29.54	MOS	LR-U	LR-B	LR-V	LR-R
NGC-4038	12:01:53.010	-18:52:03.40	MOS	LR-U	LR-B	LR-V	LR-R
NGC-4258	12:18:57.5046	+47:18:14.303	MOS	LR-U	LR-B	LR-V	LR-R
NGC-4394	12:25:55.526	+18:12:50.63	MOS	LR-U	LR-B	LR-V	LR-R
NGC-4395	12:25:48.862	+33:32:48.94	MOS	LR-U	LR-B	LR-V	LR-R
NGC-4736	12:50:53.061	+41:07:13.65	MOS	LR-U	LR-B	LR-V	LR-R
NGC-5055	13:15:49.33	+42:01:45.4	MOS	LR-U	LR-B	LR-V	LR-R
M101	14:03:12.5441	+54:20:56.220	MOS	LR-U	LR-B	LR-V	LR-R
NGC-6217	16:32:39.20	+78:11:53.4	MOS	LR-U	LR-B	LR-V	LR-R
NGC-6503	17:49:26.432	+70:08:39.72	MOS	LR-U	LR-B	LR-V	LR-R

Table 3. *List of targets for the spectroscopic study of compact stellar clustes in nearby galaxies.*

4. STUDY OF STELLAR POPULATIONS AND GAS PROPERTIES IN STAR FORMING GALAXIES

Rationale

The goal of this program is to study in detail the stellar populations (young and old) and the ionized gas properties (metallicity, electron density and temperature as well as velocity regime for some specific schocked lines) in star forming regions at different scales and metallicities.

Specific stellar population features in young burst (like WR stars in the range 3500 – 5200 at z=0), and Calcium Triplet (8400 – 8700) will be studied with unprecedent spectral resolution in a 10m telescope (the set-up LR or MR will be selected according to the magnitude and the redshift). Some specific targets will be later studied in HR set-ups.

The medium-high resolution will provide a perfect tool for gas properties diagnostics and we plan to compare values derived from the lines used at low metallity (< 3000) and the ones than we can use now thanks to the MEGARA spectral resolution,

The first part of the sample is low metallicity galaxies (e.g. IVZw166, J0159+0751, J1608+3528 etc.). The studies of low-redshift compact star-forming galaxies found in the Sloan Digital Sky Survey (SDSS) demonstrated that they are low-mass and low-metallicity galaxies with young star formation bursts (e.g. Cardamone et al. 2009; Izotov, Guseva & Thuan 2011; Izotov et al. 2016c), and depending on their redshifts, some of these galaxies have been variously classified in different manners, called blue compact dwarf (BCD) galaxies at redshifts $z < 0.1$ because of their blue colours, "Green peas" (GPs) which at redshifts of ~ 0.1 – 0.3 appear green on composite SDSS images (Cardamone et al. 2009) and luminous compact galaxies (LCGs) with diverse colours in the wider redshift range from 0 to ~0.6 (Izotov et al. 2011). The second group are nearby starburst galaxies with intermediate metallicity and circumnuclear regions (e.g. NGC7714, Gonzalez-Delgado etal. 1995; García-Vargas etal. 1997; Goldader etal. 1997; Díaz-Santos 2007). Finally, we have selected few and star forming regions up to z ~ 2 (like Q2343-BX436 at z=2.3277, Terlevich etal. 2017).

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Blocked targets

Name ID	RA	DEC	Mode	VPH
IC10	00:20:23.16	+59:17:34.70	LCB/MOS	All LRs, MRs, HRs
J0159+0751	01:59:52.75	+07:51:48.90	LCB/MOS	All LRs, MRs, HRs
IC1805	02:32:42.00	+61:27:00.00	LCB/MOS	All LRs, MRs, HRs
MatsudaC3HAE3	02:02:37.68	+01:44:33.20	LCB/MOS	All LRs, MRs, HRs
HoyosD2 12	02:28:45.05	+00:41:32.80	LCB/MOS	All LRs, MRs, HRs
SBSm19	03:37:44.00	-05:02:39.00	LCB/MOS	All LRs, MRs, HRs
IIZw40	05:55:42.60	+27:40:07.59	LCB/MOS	All LRs, MRs, HRs
NGC 3274	10:32:17.28	+49:19:47.24	LCB/MOS	All LRs, MRs, HRs
J1032+4919	10:32:56.72	+11:42:13.00	LCB/MOS	All LRs, MRs, HRs
NGC3351 (M95)	10:43:57.73	-00:02:09.24	LCB/MOS	All LRs, MRs, HRs
NGC3521	11:05:48.59	+13:35:22.16	LCB/MOS	All LRs, MRs, HRs
NGC3628	11:20:17.02	+45:51:50.94	LCB/MOS	All LRs, MRs, HRs
J1205+4551	12:05:03.55	+14:41:38.60	LCB/MOS	All LRs, MRs, HRs
NGC4254 M99	12:16:17.20	+47:34:52.40	LCB/MOS	All LRs, MRs, HRs
NGC4258	12:16:29.49	+04:28:24.92	LCB/MOS	All LRs, MRs, HRs
NGC4303	12:21:54.95	+12:39:43.45	LCB/MOS	All LRs, MRs, HRs
NGC 4388	12:25:46.82	+09:10:29.54	LCB/MOS	All LRs, MRs, HRs
NGC4522	12:33:39.66	+13:15:32.93	LCB/MOS	All LRs, MRs, HRs
IC 3583	12:36:43.56	+27:08:58.67	LCB/MOS	All LRs, MRs, HRs
NGC 4789A	12:54:05.25	+46:51:51.34	LCB/MOS	All LRs, MRs, HRs
J1355+4651	13:55:25.64	+40:03:31.44	LCB/MOS	All LRs, MRs, HRs
MAMMOTH-1	14:41:27.62	+35:28:09.30	LCB/MOS	All LRs, MRs, HRs
J1608+3528	16:08:10.36	+40:06:49.00	LCB/MOS	All LRs, MRs, HRs
NGC 2782	09:14:05.00	+21:30:02.00	LCB/MOS	All LRs, MRs, HRs
NGC 2903	09:32:10.00	+33:26:57.65	LCB/MOS	All LRs, MRs, HRs
AGC 198691	09:43:32.36	+19 58 06.35	LCB/MOS	All LRs, MRs, HRs
UGC6697	11:43:49.12	+47:51:32.00	LCB/MOS	All LRs, MRs, HRs
NGC 3949	11:53:41.00	+55:07:36.00	LCB/MOS	All LRs, MRs, HRs
NGC 3982	11:56:28.00	+29:53:43.00	LCB/MOS	All LRs, MRs, HRs
NGC 4314	12:22:32.00	+15:49:20.00	LCB/MOS	All LRs, MRs, HRs
NGC 4321	12:22:55.00	+44:05:36.81	LCB/MOS	All LRs, MRs, HRs
NGC 4449	12:28:11.12	+05:18:41.13	LCB/MOS	All LRs, MRs, HRs
NGC4713	12:49:57.89	+36:35:38.00	LCB/MOS	All LRs, MRs, HRs

NGC 5033	13:13:28.00	+47:11:54.00	LCB/MOS	All LRs, MRs, HRs
NGC 5194	13:29:52.00	+08:53:01.00	LCB/MOS	All LRs, MRs, HRs
NGC 5248	13:37:32.00	+41:40:14.00	LCB/MOS	All LRs, MRs, HRs
NGC 5929/30	15:26:06.00	+15:11:42.00	LCB/MOS	All LRs, MRs, HRs
NGC 5953/54	15:34:32.00	+14:58:50.00	LCB/MOS	All LRs, MRs, HRs
NGC 6574	18:11:51.00	+66:06:20.00	LCB/MOS	All LRs, MRs, HRs
NGC 6951	20:37:15.00	+08:52:25.00	LCB/MOS	All LRs, MRs, HRs
NGC7469	23:03:16.00	+31:08:01.00	LCB/MOS	All LRs, MRs, HRs
Mk927	23:12:29.00	+00:18:20.00	LCB/MOS	All LRs, MRs, HRs
HoyosD2 5	23:28:41.65	+00:20:40.70	LCB/MOS	All LRs, MRs, HRs
HoyosD2 1	23:29:08.20	+02:09:19.00	LCB/MOS	All LRs, MRs, HRs
NGC 7714	23:36:14.00	+12:48:09.30	LCB/MOS	All LRs, MRs, HRs
Q2343-BM133	23:46:16.18	+12:49:45.50	LCB/MOS	All LRs, MRs, HRs
Q2343-BX660	23:46:29.43	+12:47:55.10	LCB/MOS	All LRs, MRs, HRs
Q2343-BX435	23:46:26.36	+12:47:47.40	LCB/MOS	All LRs, MRs, HRs
Q2343-BX418	23:46:18.57	+12:47:56.00	LCB/MOS	All LRs, MRs, HRs
IVZw166	23:48:22.00	+32:30:12.00	LCB/MOS	All LRs, MRs, HRs

Table 4. *List of targets for the study of stellar populations and gas properties in star forming galaxies. Blocked area around central object: 5 arcmin x 5 arcmin.*

5. DISSECTING Z~2-3 HEII-EMITTERS: SPECTRAL TEMPLATES FOR THE SOURCES OF THE COSMIC DAWN

Rationale: We propose to use the MEGARA-IFU to obtain, for the first time, spatially and spectrally resolved information on the HeII emission for spectroscopically confirmed HeII-emitters selected from cosmological surveys (e.g. VUDS). From these data, we will derive the total HeII-ionizing photon budget (free from aperture effects!) and constrain the ionization mechanism for the HeII line. A voxel-by-voxel analysis of the HeII line, and additional emission lines (e.g., Lyalpha, CIII] 1909) will yield novel spatial information on the HeII-ionizing sources, and the ISM properties in our HeII-emitters.

Sample:

Name	RA(J2000)	Dec(J2000)
20107579	02 25 44.67	-04 46 13.65
530029221	03 32 12.93	-27 52 36.79
530017949	03 32 20.57	-27 56 56.26
530037901	03 32 21.14	-27 49 25.81
530039133	03 32 21.94	-27 48 55.63

530036005	03 32 40.77	-27 50 02.63
530043719	03 32 43.39	-27 47 10.50
530043304	03 32 47.32	-27 47 18.63
530032957	03 32 51.40	-27 51 10.88
J080840.84	08 08 40.85	+17 28 56.46
J081647.75	08 16 47.96	+33 03 33.62
J082555	08 25 55.52	+35 32 31.90
J093840.28	09 38 40.28	+08 08 09.89
J094416.61	09 44 16.61	+54 11 34.26
J0945+3835	09 45 19.55	+38 35 52.90
510994594	10 00 17.39	+02 16 57.50
510998490	10 00 21.17	+02 15 38.06
511236775	10 00 22.10	+02 21 04.82
511229098	10 00 22.88	+02 23 11.32
511222619	10 00 25.50	+02 27 07.00
511453930	10 00 27.12	+02 32 53.81
511229433	10 00 27.33	+02 24 32.74
511245444	10 00 35.06	+02 17 49.60
511244889	10 00 35.38	+02 18 05.87
5101001041	10 00 39.00	+02 14 44.88
5100998761	10 00 39.54	+02 15 38.51
5121244426	10 00 41.53	+02 18 17.33
5101242274	10 00 45.86	+02 19 04.73
J104457	10 44 57.79	+03 53 13.10
J105400	10 53 59.97	+09 49 52.64
J1119+5130	11 19 34.26	+51 30 12.24
J113202.11	11 32 2.54	+57 22 45.70
J120122.32	12 01 22.31	+02 11 8.30
J123048.61	12 30 48.60	+12 02 42.83
J124827	12 48 27.79	+48 23 03.3
J2230-0006	22 30 36.83	-00 06 36.58

20107579	02 25 44.67	-04 46 13.65
530029221	03 32 12.93	-27 52 36.79

Table 5. *List of targets for Dissecting z~2-3 HeII-emitters.*

AOI is 1 arcmin (in radius) in around the coordinates given above.

Setups: All LR, MR, HR VPHs (LCB & MOS).

6. CHEMODYNAMICS OF METAL-POOR EXTREME EMISSION LINE GALAXIES AT INTERMEDIATE Z

Rationale: We propose bi-dimensional spectroscopic observations of the ionized gas in three Extremely Metal-Poor (XMP) Extreme Emission Line Galaxies (EELGs) at intermediate redshift (0.35-0.7). These objects have been selected from the zCOSMOS-20k survey (Amorín et al. 2015, A&A 578A, 105) because of their intense and high-EW [O III] emission lines and very low metallicities as obtained from their [O III] electron temperatures. Our aim is assessing whether these objects are metal-poor objects in formation resembling the galaxy building blocks in the early Universe or evolved interacting systems in which starburst activity, disrupted morphology, and the dilution of the gas-phase metallicity are owing to the infall of chemically unpolluted gas. The use of the central bundle of MEGARA at R 6000) will be fundamental to simultaneously obtain both the high spatial and spectral resolution needed for deblending optical emission lines and for deriving abundances of kinematically distinct gas components.

Sample:

Name	RA(J2000)	Dec(J2000)
zC825959	09 59 32.00	+02 09 55.00
zC701741	10 01 34.00	+02 34 44.00
zC836108	10 02 47.00	+02 34 04.00

Table 6. *List of targets for chemodynamics of metal-poor extreme emission line galaxies at intermediate Z.*

AOI is 1 arcmin (in radius) in around the coordinates given above.

Setups: All LR, MR, HR VPHs (LCB & MOS).

7. CONSTRAINING WOLF-RAYET STARS IN EXTREMELY METAL-POOR GALAXIES

Rationale: Our aim is to take advantage of the catalogue of Wolf-Rayet galaxies in the SDSS with a well understood selection function to observe with MEGARA-GTC the subsample of extremely metal-poor objects (12+log(O/H) < Z⊙/10) using integral field spectroscopy of the starburst regions using the compact bundle mode. The observations of these galaxies using integrated spectra from fibres has brought to light large differences between model predictions and observations with respect to the strength of the Wolf-Rayet features at low metallicity. MEGARA-GTC observations will provide enough spatial and spectral information to characterize the WR population and the ionic abundances and give new and precise constraints to the models in this regime.

Sample:

Name	RA(J2000)	Dec(J2000)
SBS0335-052	03 37 44.00	-05 02 40.00
SHOC220	08 40 29.91	+47 07 10.27
IZw18	09 34 02.02	+55 14 27.86
HS1013+3809	10 16 24.51	+37 54 45.96
Mrk178	11 33 28.90	+49 14 14.00
SBS1211+540	12 14 02.50	+53 45 17.00
SBS1249+493	12 51 52.50	+49 03 28.00

Table 7. *List of targets for constraining Wolf-Rayet stars in extremely metal-poor galaxies.*

AOI is 1 arcmin (in radius) in around the coordinates given above.

Setups: All LR, MR, HR VPHs (LCB & MOS).

8. EXPLORING THE PHYSICAL PROPERTIES OF SHOCKED IONIZED GAS IN INTERACTING GALAXIES

Rationale: Interactions of galaxies play an important role in the evolution of galaxies. In particular, high-velocity encounter can lead to shocks where the interstellar material is heated to very high temperatures and presents properties where multiple kinematical components are apparent. Stephan's Quintet, a paradigm of this kind of phenomena, shows a bar-like shocked region with very broad emission lines in the optical ([OII]3727, Hbeta, [OIII]4959,5007,

[OI]6300, [NII]6548,6583, Halpha, [SII]6717,6731, ...) that we propose to be observed with MEGARA to understand the physical mechanisms that govern the physical properties of the ionized interstellar gas.

Sample:

Name	RA(J2000)	Dec(J2000)
Stephan's Quintet	22 35 59.10	+33 57 31.00

Table 8. *List of targets for exploring the physical properties of shocked ionized gas in interacting galaxies.*

AOI is 5 arcmin (in radius) in around the coordinates given above.

Setups: All LR, MR, HR VPHs (LCB & MOS).

9. GALACTIC WINDS IN NEARBY GALAXIES

Rationale: We aim to characterize neutral and ionized winds in nearby galaxies previously identified in the CALIFA survey as showing strong NaD absorption. We also incorporate to the study the northern ULIRGs from Murphy et al. (1996, AJ 111, 1025).

Sample: CALIFA sub-sample

Name	RA(J2000)	Dec(J2000)
ARP220	15 34 57.25	+23 30 11.3
IC0485	08 00 19.77	+26 42 05.2
MCG-01-01-012	23 59 10.80	-04 11 30.6
MCG-02-08-014	02 52 23.40	-08 30 37.5
NGC0169	00 36 51.60	+23 59 27.3
NGC0499	01 23 11.50	+33 27 38.0
NGC0810	02 05 28.90	+13 15 05.0
NGC0833	02 09 20.84	-10 07 59.1

NGC1142	02 55 12.20	-00 11 00.8
NGC1167	03 01 42.37	+35 12 20.7
NGC2522	08 06 13.44	+17 42 23.7
NGC3303	10 36 59.80	+18 08 12.0
NGC3406NED01	10 51 43.63	+51 01 19.8
NGC5218	13 32 10.38	+62 46 03.9
NGC5394	13 58 33.65	+37 27 12.5
NGC5423	14 02 48.62	+09 20 29.0
NGC5616	14 24 20.70	+36 27 41.1
NGC5675	14 32 39.83	+36 18 07.9
NGC5739	14 42 28.91	+41 50 32.4
NGC5908	15 16 43.22	+55 24 33.3
NGC5930	15 26 07.94	+41 40 33.8
NGC5934	15 28 12.78	+42 55 47.7
NGC5953	15 34 32.38	+15 11 37.6
NGC5987	15 39 57.37	+58 04 46.3
NGC6027	15 59 12.54	+20 45 48.1
NGC6361	17 18 41.09	+60 36 29.4
NGC7025	21 07 47.34	+16 20 09.1
NGC7436B	22 57 57.54	+26 08 59.8
NGC7625	23 20 30.13	+17 13 32.0
NGC7683	23 29 03.82	+11 26 42.6
NGC7684	23 30 32.04	+00 04 51.8
NGC7711	23 35 39.37	+15 18 07.1
UGC00148	00 15 51.28	+16 05 23.2
UGC01274	01 49 11.62	+12 51 11.7
UGC03038	04 25 01.31	+07 10 15.6
UGC03107	04 37 21.83	+09 32 40.1
UGC03969	07 41 14.35	+27 36 50.9
UGC04136	07 59 54.44	+47 24 47.3
UGC05111	09 36 52.38	+66 47 18.2

UGC05498NED01	10 12 03.66	+23 05 07.6
UGC08107	12 59 39.78	+53 20 28.2
UGC09537	14 48 26.75	+34 59 53.0
UGC09711	15 06 36.63	+09 26 20.4
UGC10123	15 59 02.96	+51 18 16.8
UGC10205	16 06 40.18	+30 05 56.7
UGC10380	16 25 49.91	+16 34 33.8
UGC10384	16 26 46.68	+11 34 49.0
UGC11717	21 18 35.31	+19 43 05.3
UGC12633	23 30 13.65	+15 45 39.7
IC1683	01 22 39.00	+34 26 13.0
NGC0023	00 09 53.41	+25 55 25.6
NGC0165	00 36 28.92	-10 06 22.2
NGC0192	00 39 13.43	+00 51 51.6
NGC0716	01 52 59.68	+12 42 30.5
NGC0873	02 16 32.36	-11 20 54.8
NGC2540	08 12 46.45	+26 21 42.4
NGC2543	08 12 57.92	+36 15 16.7
NGC3994	11 57 36.87	+32 16 39.4
NGC5267	13 40 39.96	+38 47 38.7
NGC5522	14 14 50.37	+15 08 48.8
NGC5559	14 19 12.78	+24 47 55.4
NGC5635	14 28 31.76	+27 24 32.2
NGC5980	15 41 30.40	+15 47 15.6
NGC6186	16 34 25.48	+21 32 27.2
NGC7591	23 18 16.28	+06 35 08.9
NGC7611	23 19 36.60	+08 03 47.7
NGC7619	23 20 14.53	+08 12 22.5
NGC7671	23 27 19.34	+12 28 02.7
NGC7738	23 44 02.06	+00 30 59.9
NGC7787	23 56 07.82	+00 32 58.1

UGC02367	02 53 41.16	+06 15 55.0
UGC02403	02 55 57.26	+00 41 33.4
UGC04132	07 59 13.05	+32 54 52.9
UGC04145	07 59 40.12	+15 23 12.5
UGC05108	09 35 26.29	+29 48 45.4
UGC06312	11 18 00.20	+07 50 41.6
UGC10097	15 55 43.25	+47 52 02.2
UGC10695	17 05 05.58	+43 02 35.4

Table 9. *List of targets for the study of Galactic Winds in nearby galaxies (CALIFA subsample).*

AOI is 2 arcmin (in radius) in around the coordinates given above.

Setups: All LR, MR, and HR-R VPHs (LCB & MOS)

Sample: Nearby ULIRGS sub-sample

Name	RA (J2000)	Dec (J2000)
2MASXJ00114330-0722073	00 11 43.32	-07 22 07.1
2MASXJ00180398+5511129	00 18 03.96	+55 11 13.0
2MASXJ00212652-0839261	00 21 26.52	-08 39 26.0
2MASXJ00285413+4308149	00 28 54.15	+43 08 15.3
2MASXJ00480675-2848187	00 48 06.79	-28 48 18.6
GALEXASCJ010250.01-222157.4	01 02 50.01	-22 21 57.2
GALEXASCJ013221.29-072909.5	01 32 21.39	-07 29 08.1
2MASXJ01552485+5239276	01 55 24.85	+52 39 27.4
MRK1014	01 59 50.21	+00 23 40.6
IRAS03158+4227	03 19 12.40	+42 38 28.0
2MASXJ03544214+0037033	03 54 42.19	+00 37 03.4
GALEXMSCJ042604.91+144340.8	04 26 04.80	+14 43 37.3
2MASXJ05210136-2521450	05 21 01.39	-25 21 45.4

2MASXJ05271591+0106021	05 27 16.32	+01 06 00.1
2MASXJ08065079+5235074	08 06 50.80	+52 35 07.3
2MASXJ08332058-2509332	08 33 20.60	-25 09 33.7
2MASXJ08380365+5055090	08 38 03.61	+50 55 08.8
IRAS08572+3915	09 00 25.39	+39 03 54.4
2MASXJ09083471-1300561	09 08 34.78	-13 00 53.9
2MASXJ09133888-1019196	09 13 38.84	-10 19 20.0
UGC05101	09 35 51.60	+61 21 11.4
IRAS09583+4714	10 01 30.82	+46 59 44.2
KUG1003+488	10 06 46.20	+48 37 46.0
IRAS10190+1322	10 21 42.60	+13 06 55.0
2MASXJ10402919+1053178	10 40 29.17	+10 53 18.3
2MASXJ10522356+4408474	10 52 23.52	+44 08 47.7
2MASXJ10591815+2432343	10 59 18.12	+24 32 34.5
LCRSB110930.3-023804	11 12 03.38	-02 54 22.4
2MASXJ11531422+1314276	11 53 14.23	+13 14 27.9
2MASXJ12022678-0129155	12 02 26.76	-01 29 15.3
IRAS12071-0444	12 09 45.13	-05 01 13.8
IRAS12112+0305	12 13 46.00	+02 48 38.0
MRK0231	12 56 14.23	+56 52 25.2
MRK0273	13 44 42.11	+55 53 12.7
4C+12.50	13 47 33.36	+12 17 24.3
2MASXJ13561001+2905355	13 56 10.00	+29 05 35.2
IRAS14348-1447	14 37 38.40	-15 00 20.0
2MASXJ14375764-2007448	14 37 57.63	-20 07 44.9
2MASXJ14410437+5320088	14 41 04.38	+53 20 08.7
2MASXJ15023198+1421352	15 02 31.95	+14 21 35.4
2MASXJ15155520-2009172	15 15 55.18	-20 09 16.8
2MASXJ15265746+1009004	15 26 57.47	+10 09 00.3
IRAS15250+3609	15 26 59.40	+35 58 37.5
ARP220	15 34 57.25	+23 30 11.3

IRAS15462-0450	15 48 56.81	-04 59 33.6
2MASXJ16114042-0147062	16 11 40.43	-01 47 06.6
2MASXJ16491420+3425096	16 49 14.20	+34 25 09.7
SBS1648+547	16 49 47.03	+54 42 35.5
2MASXJ17034196+5813443	17 03 41.94	+58 13 44.7
2MASXJ17232194-0017009	17 23 21.96	-00 17 00.9
2MASXJ17595385+0629115	17 59 53.87	+06 29 11.5
2MASXJ18383543+3552197	18 38 35.41	+35 52 19.9
IRAS18443+7433	18 42 54.80	+74 36 21.0
2MASXJ18485387+3237287	18 48 53.86	+32 37 28.5
2MASXJ19322229-0400010	19 32 21.25	-03 59 56.3
IRAS19458+0944	19 48 15.70	+09 52 05.0
IRAS20046-0623	20 07 19.29	-06 14 26.4
2MASXJ20112386-0259503	20 11 23.87	-02 59 50.7
IRAS20414-1651	20 44 18.21	-16 40 16.2
IRAS21396+3623	21 41 39.90	+36 36 59.0
2MASXJ21530552-0614496	21 53 05.50	-06 14 50.0
IRAS22491-1808	22 51 49.26	-17 52 23.4
2MASXJ23351192+2930000	23 35 11.93	+29 30 00.2
2MASXJ23390127+3621087	23 39 01.27	+36 21 08.3

Table 10. *List of targets for the study of Galactic Winds in nearby galaxies (ULIRGS subsample).*

AOI is 1 arcmin (in radius) in around the coordinates given above.

Setups: All LR, MR, and HR-R VPHs (LCB)

10. DWARF GALAXIES IN COSMOLOGICAL FIELDS

Rationale: We aim to identify dwarf emission-line galaxies at intermediate to high redshift in cosmological fields and to determine their internal kinematics along with basic parameters such as ionized-gas chemical abundances (from the [NII]6584/Halpha line ratio) and SFR measurements.

Sample:

Name	RA(J2000)	Dec(J2000)	AOI
SXDS	02 18 00.0	-05 00 00.0	1x1 sq. deg.
Abell 370	02 39 52.9	-01 34 36.5	4x4 sq. arcmin.
MACSJ0717.5+3745	07 17 34.0	+37 44 49.0	4x4 sq. arcmin.
GOODS-N	12 36 49.0	+62 12 58.0	10x10 sq. arcmin
EGS	14 16 35.0	+52 16 25.0	70x10 sq. arcmin.

Table 11. *List of targets for the study of dwarf galaxies in cosmological fields.*

Setups: LR-V, LR-R, LR-I, LR-Z, MR-V, MR-VR, MR-R, MR-RI, MR-I, MR-Z (MOS).

11. GRAVITATIONAL LENSES

Rationale

The objective of the study associated with these targets is the observation and characterization of QSOs affected by gravitational macro/micro-lensing. MEGARA LCB field allows to simultaneously observe most of QSOs components. The relative high spectal resolution of MEGARA in conjuction with the large aperture of the GTC telescope offers a unique opportunity to observe in detail the presence of microlensing both in the continuum and possibly in the BLR spectral lines of these QSOs.

References

Gómez-Álvarez, P., Astronomische Nachrichten, Vol.325, Issue 2, p.132-134
Gómez-Álvarez, P., The Astrophysical Journal, Volume 645, Issue 1, pp. L5-L8.

Blocked targets

OBJECT	RA	DEC	mode	VPHs			
MG0414+0534	04:14:37.73	+05:34:44.3	LCB	LR-*	MR-*		
HE0435-1223	04:38:14.9	-12:17:14.4	LCB	LR-*	MR-*		
SDSS J0819+5356	08:20:00	+53:56:24	LCB	LR-*	MR-*		
SDSS J083803.68+540642.0	08:38:03.685	+54:06:42.07	LCB	LR-*	MR-*		

RXJ0911+0551	09:11:27.50	+05:50:52.0	LCB	LR-*	MR-*		
HE0926-0201	09:29:13.57	-02:14:46.4	LCB	LR-*	MR-*		
Q0957+561	10:01:20.78	+55:53:49.4	LCB	LR-*	MR-*		
SDSS J1001+5027	10:01:29	+50:27:57	LCB	LR-*	MR-*		
SDSS_J1004+4112	10:04:34.91	+41:12:42.8	LCB	LR-*	MR-*		
SDSS J0819+5356	10:29:14	+26:23:18	LCB	LR-*	MR-*		
HE1104-1805	11:06:33.45	-18:21:24.2	LCB	LR-*	MR-*		
PG1115+080	11:18:17.00	+07:45:57.7	LCB	LR-*	MR-*		
RXJ1131-1231	11:31:51.6	-12:31:57	LCB	LR-*	MR-*		
SDSSJ1148+1930 (Cosmic horseshoe)	11:48:33.14	+19:30:02.96	LCB	LR-*	MR-*		
SDSS J1206+4332	12:06:29.6	+43:32:17	LCB	LR-*	MR-*		
SDSS J1320+1644	13:20:59	16:44:03	LCB	LR-*	MR-*		
SDSS J1349+1227	13:49:29.84	+12:27:06.8	LCB	LR-*	MR-*		
B1608+656	16:09:13.96	+65:32:29.0	LCB	LR-*	MR-*		
MG2016+112	20:19:18.15	+11:27:08.3	LCB	LR-*	MR-*		
Mk509	20:44:09.768	-10:43:24.44	LCB	LR-*	MR-*		
HE2202-2557	22:05:29.79	-25:42:22.8	LCB	LR-*	MR-*		
SDSS_J2222+2745	22:22:08.73	+27:45:33.08	LCB	LR-*	MR-*		
Q2237+0305	22:40:30.34	+03:21:28.8	LCB	LR-*	MR-*		
Ark 564	22:42:39.309	+29:43:31.55	LCB	LR-*	MR-*		

Table 12. *List of targets for the study of gravitational lenses.*