Table 1: Dynamical properties for each model. For each property, the Header Data Unit (HDU) in which it is stored, the name, its units, and a brief description are presented. The HDU ranging from 2 to 9 correspond to models  $JAM_{cyl} + MFL$ ,  $JAM_{sph} + MFL$ ,  $JAM_{cyl} + NFW$ ,  $JAM_{sph} + NFW$ ,  $JAM_{cyl} + fixedNFW$ ,  $JAM_{sph} + fixedNFW$ ,  $JAM_{cyl} + gNFW$ ,  $JAM_{sph} + gNFW$ .

HDU (1)	Name (2)	Units (3)	Description (4)
0	Primary	. ,	Empty primary header
1	plate		The plate ID (e.g. 7443)
	ifudsgn		The IFU design ID (e.g.12703)
	plateifu		The plate+ifudsgn name (e.g. 7443-12703)
	mangaid		Unique MaNGA ID (e.g. 1-114145)
	obj_ra	degree	Right ascension of the science object in J2000
	obj_dec	degree	Declination of the science object in J2000
	ebvgal	C	E(B-V) value from sdss dust routine for this IFU
	target		Flag for subsample of MaNGA (Primary: 0, Secondary: 1, colour-Enhanced: 2)
	DA	Mpc	Adopted angular-diameter distance,
	Re_kpc_MGE	kpc	with a flat Universe of $\Omega_{\rm m} = 0.307$ , $h = 0.677$ (Planck Collaboration et al. 2016) Effective radius (projected circular half-light radius from MGE fitting,
	D : 1 MCE	1	in SDSS r-band)
	Rmaj_kpc_MGE	kpc	Major axis of elliptical half-light isophote from MGE fitting, in SDSS r-band
	Lum_tot_MGE	$\lg(\mathrm{L}_{\odot})$	Total luminosity from MGE fitting, in SDSS r-band, not corrected for the Galactic and internal dust extinction
	Lambda_Re		Specific stellar angular momentum within elliptical half-light isophote
	Sigma_Re	${\rm kms^{-1}}$	Effective velocity dispersion within elliptical half-light isophote
	Eps_MGE		Ellipticity of the half-light isophote from MGE fitting
	nsa_iauname		The accepted IAU name
	Z		Redshift of the galaxy
	nsa_field		The SDSS field covering the target
	nsa_run		The SDSS run covering the target
	nsa_camcol		The SDSS camcol covering at talget  The SDSS camcol covering catalog position
	nsa_version		The version of the NSA catalogue used to select these targets
	nsa_id		The NSAID field in the NSA catalogue v1
	nsa_nsaid_v1b		The NSAID of the target in the NSA_v1b_0_0_v2 catalogue (if applicable)
	nsa_sersic_absmag		Absolute magnitude estimates for FNugriz from K-corrections ( $\Omega_{\rm m}$ = 0.3,
	nco almatua ahamaa		$\Omega_{\Lambda} = 0.7$ , h = 1), the value is interpreted as M-5lgh
	nsa_elpetro_absmag	1 (1 = 2 3.6 )	As nsa_sersic_absmag but from elliptical Petrosian apertures
	nsa_sersic_mass	$lg(h^{-2} M_{\odot})$	Stellar mass from K-correction fit for Sersic fluxes
	nsa_elpetro_mass	$lg(h^{-2} M_{\odot})$	Stellar mass from K-correction fit for elliptical Petrosian fluxes
	nsa_sersic_ba		Axial ratio b/a from 2D Sersic fit in SDSS r-band
	nsa_sersic_n		Sersic index from 2D Sersic fit in SDSS r-band
	nsa_sersic_phi	degree	Angle (E of N) of major axis in 2D Sersic fit (r-band)
	nsa_sersic_th50	arcsec	Sersic 50% light radius along major axis (r-band)
	nsa_sersic_flux	nanomaggies	2D Sersic fit flux in FNugriz (GALEX-SDSS photometric systems)
	Qual		Visual quality of JAM models, classified as -1, 0, 1, 2, 3 (from worst to best)
	drp3qual		Data reduction quality marked by DRP pipeline,
			1 for high-quality, 0 for critical-quality or unusual quality
2	inc_deg	degree	Best-fit inclination angle (being 90° for edge-on)
	beta_z		Best-fit radial velocity anisotropy in cylindrical coordinates
	log_ML_dyn	$lg(M_{\odot}/L_{\odot})$	Best-fit dynamical mass-to-light ratio
	kappa		The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$lg(M_{\odot})$	Enclosed total mass within a sphere of effective radius
	chi2_dof		The reduced chi-square of best-fit model (The values are scaled to
			account for the effect of standard deviation of the $\chi^2$ itself,
			should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$\lg(\mathrm{M}_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius
	MW_Gt_Re		Mass-weighted total density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius

Table 1 – continued

IIDII	D .	TT '4	Description
HDU (1)	Parameters (2)	Units (3)	(4)
(-)	Gt_Re	(=)	Average logarithmic total density slope between 0.1 and 1 effective radius
3	inc_deg	degree	Best-fit inclination angle (being 90° for edge-on)
3	beta_r	· ·	Best-fit radial velocity anisotropy in spherical coordinates
	log_ML_dyn	$lg(M_{\odot}/L_{\odot})$	Best-fit dynamical mass-to-light ratio
	kappa		The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$lg(M_{\odot})$	Enclosed total mass within a sphere of effective radius
	chi2_dof		The reduced chi-square of best-fit model (The values are scaled to
			account for the effect of standard deviation of the $\chi^2$ itself,
			should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$\lg(\mathrm{M}_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius
	MW_Gt_Re		Mass-weighted total density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius
	Gt_Re		Average logarithmic total density slope between 0.1 and 1 effective radius
4	inc_deg		Best-fit inclination angle (being 90° for edge-on)
	beta_z	1 (3.5 (7. )	Best-fit radial velocity anisotropy in cynlindrical coordinates
	log_ML_stellar	$lg(M_{\odot}/L_{\odot})$	Best-fit stellar mass-to-light ratio
	log_rho_s	$lg(M_{\odot} kpc^{-3})$	The characteristic density of NFW profile
	rs	kpc	The break radius of NFW profile
	kappa	1 (3.6.)	The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$\lg(\mathrm{M}_{\odot})$	Enclosed total mass within a sphere of effective radius
	log_Ms_Re	$\lg(\mathrm{M}_{\odot})$	Enclosed stellar mass within a sphere of effective radius
	log_Md_Re	$\lg(\mathrm{M}_{\odot})$	Enclosed dark matter mass within a sphere of effective radius
	fdm_Re	1a/M /I )	Dark matter fraction within a sphere of effective radius
	log_ML_dyn_Re	$lg(M_{\odot}/L_{\odot})$	Dynamical mass-to-light ratio within effective radius The reduced chi-square of best-fit model (The values are scaled to
	chi2_dof		account for the effect of standard deviation of the $\chi^2$ itself,
			should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$\lg(\mathrm{M}_{\odot}/\mathrm{L}_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius
	log_Ms_rhalf	$\lg(M_{\odot}/L_{\odot})$	Enclosed stellar mass within a sphere of 3D half-light radius
	log_Md_rhalf	$\lg(\mathrm{M}_{\odot}/\mathrm{L}_{\odot})$	Enclosed dark matter mass within a sphere of 3D half-light radius
	MW_Gt_Re	15(1110/20)	Mass-weighted total density slope within a sphere of effective radius
	MW_Gs_Re		Mass-weighted stellar density slope within a sphere of effective radius
	MW_Gd_Re		Mass-weighted dark matter density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius
	MW_Gs_rhalf		Mass-weighted stellar density slope within a sphere of 3D half-light radius
	MW_Gd_rhalf		Mass-weighted dark matter density slope within a sphere of 3D half-light radius
	Gt_Re		Average logarithmic total density slope between 0.1 and 1 effective radius
	Gs_Re		Average logarithmic stellar density slope between 0.1 and 1 effective radius
	Gd_Re		Average logarithmic dark matter density slope between 0.1 and 1 effective radius
5	inc_deg		Best-fit inclination angle (being 90° for edge-on)
	beta_r		Best-fit radial velocity anisotropy in spherical coordinates
	log_ML_stellar	$\lg(M_{\odot}/L_{\odot})$	Best-fit stellar mass-to-light ratio
	log_rho_s	$lg(M_{\odot} kpc^{-3})$	The characteristic density of NFW profile
	rs	kpc	The break radius of NFW profile
	kappa		The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$lg(M_{\odot})$	Enclosed total mass within a sphere of effective radius
	log_Ms_Re	$lg(M_{\odot})$	Enclosed stellar mass within a sphere of effective radius
	log_Md_Re	$lg(M_{\odot})$	Enclosed dark matter mass within a sphere of effective radius
	fdm_Re	. /	Dark matter fraction within a sphere of effective radius
	log_ML_dyn_Re	$lg(M_{\odot}/L_{\odot})$	Dynamical mass-to-light ratio within effective radius
	chi2_dof		The reduced chi-square of best-fit model (The values are scaled to
			account for the effect of standard deviation of the $\chi^2$ itself,
			should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius

Table 1 – continued

			Table 1 – continued
HDU	Parameters	Units	Description
(1)	(2)	(3)	(4)
	log_Ms_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed stellar mass within a sphere of 3D half-light radius
	log_Md_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed dark matter mass within a sphere of 3D half-light radius
	MW_Gt_Re		Mass-weighted total density slope within a sphere of effective radius
	MW_Gs_Re		Mass-weighted stellar density slope within a sphere of effective radius
	MW_Gd_Re		Mass-weighted dark matter density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius
	MW_Gs_rhalf		Mass-weighted stellar density slope within a sphere of 3D half-light radius
	MW_Gd_rhalf		Mass-weighted dark matter density slope within a sphere of 3D half-light radius
	Gt_Re		Average logarithmic total density slope between 0.1 and 1 effective radius
	Gs_Re		Average logarithmic stellar density slope between 0.1 and 1 effective radius
	Gd_Re		Average logarithmic dark matter density slope between 0.1 and 1 effective radius
6	inc_deg		Best-fit inclination angle (being 90° for edge-on)
	beta_z	1 /N/ /T )	Best-fit radial velocity anisotropy in cynlindrical coordinates
	log_ML_stellar	$lg(M_{\odot}/L_{\odot})$	Best-fit stellar mass-to-light ratio
	log_rho_s	$lg(M_{\odot} kpc^{-3})$	The characteristic density of NFW profile
	rs	kpc	The break radius of NFW profile
	kappa	1 (3.5.)	The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$\lg(\mathrm{M}_{\odot})$	Enclosed total mass within a sphere of effective radius
	log_Ms_Re	$\lg(\mathrm{M}_{\odot})$	Enclosed stellar mass within a sphere of effective radius
	log_Md_Re	$\lg(M_{\odot})$	Enclosed dark matter mass within a sphere of effective radius
	fdm_Re	1 (34 /1 )	Dark matter fraction within a sphere of effective radius
	log_ML_dyn_Re	$lg(M_{\odot}/L_{\odot})$	Dynamical mass-to-light ratio within effective radius
	chi2_dof		The reduced chi-square of best-fit model (The values are scaled to
			account for the effect of standard deviation of the $\chi^2$ itself,
			should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$\lg(\mathrm{M}_{\odot}/\mathrm{L}_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius
	log_Ms_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed stellar mass within a sphere of 3D half-light radius
	log_Md_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed dark matter mass within a sphere of 3D half-light radius
	MW_Gt_Re		Mass-weighted total density slope within a sphere of effective radius
	MW_Gs_Re		Mass-weighted stellar density slope within a sphere of effective radius
	MW_Gd_Re		Mass-weighted dark matter density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius
	MW_Gs_rhalf		Mass-weighted stellar density slope within a sphere of 3D half-light radius
	MW_Gd_rhalf		Mass-weighted dark matter density slope within a sphere of 3D half-light radius
	Gt_Re		Average logarithmic total density slope between 0.1 and 1 effective radius
	Gs_Re		Average logarithmic stellar density slope between 0.1 and 1 effective radius
	Gd_Re		Average logarithmic dark matter density slope between 0.1 and 1 effective radius
7	inc_deg		Best-fit inclination angle (being 90° for edge-on)
	beta_r	1-/M /I )	Best-fit radial velocity anisotropy in spherical coordinates
	log_ML_stellar	$lg(M_{\odot}/L_{\odot})$	Best-fit stellar mass-to-light ratio
	log_rho_s	$lg(M_{\odot} kpc^{-3})$	The characteristic density of NFW profile
	rs Ironno	kpc	The break radius of NFW profile
	kappa	la(M.)	The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$\lg(M_{\odot})$	Enclosed total mass within a sphere of effective radius
	log_Ms_Re	$\lg(M_{\odot})$	Enclosed stellar mass within a sphere of effective radius
	log_Md_Re	$\lg(\mathrm{M}_{\odot})$	Enclosed dark matter mass within a sphere of effective radius
	fdm_Re	lα(M - /I )	Dark matter fraction within a sphere of effective radius
	log_ML_dyn_Re	$lg(M_{\odot}/L_{\odot})$	Dynamical mass-to-light ratio within effective radius  The reduced chi square of best fit model (The values are scaled to
	chi2_dof		The reduced chi-square of best-fit model (The values are scaled to
			account for the effect of standard deviation of the $\chi^2$ itself,
	-1-16 1	1	should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius
	log_Ms_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed stellar mass within a sphere of 3D half-light radius
	log_Md_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed dark matter mass within a sphere of 3D half-light radius
	MW_Gt_Re		Mass-weighted total density slope within a sphere of effective radius

Table 1 – continued

			Table 1 – continued
HDU	Parameters	Units	Description
(1)	(2)	(3)	(4)
	MW_Gs_Re		Mass-weighted stellar density slope within a sphere of effective radius
	MW_Gd_Re		Mass-weighted dark matter density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius
	MW_Gs_rhalf		Mass-weighted stellar density slope within a sphere of 3D half-light radius
	MW_Gd_rhalf		Mass-weighted dark matter density slope within a sphere of 3D half-light radius
	Gt_Re		Average logarithmic total density slope between 0.1 and 1 effective radius
	Gs_Re		Average logarithmic stellar density slope between 0.1 and 1 effective radius
	Gd_Re		Average logarithmic dark matter density slope between 0.1 and 1 effective radius
8	inc_deg		Best-fit inclination angle (being 90° for edge-on)
	beta_z		Best-fit radial velocity anisotropy in cynlindrical coordinates
	log_ML_stellar	$lg(M_{\odot}/L_{\odot})$	Best-fit stellar mass-to-light ratio
	log_rho_s	$lg(M_{\odot} kpc^{-3})$	The characteristic density of gNFW profile
			The break radius of gNFW profile
	rs	kpc	- ·
	gamma_gNFW		The inner density slope of gNFW profile
	kappa	. (2.5.)	The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$\lg(\mathrm{M}_{\odot})$	Enclosed total mass within a sphere of effective radius
	log_Ms_Re	$lg(M_{\odot})$	Enclosed stellar mass within a sphere of effective radius
	log_Md_Re	$lg(M_{\odot})$	Enclosed dark matter mass within a sphere of effective radius
	fdm_Re		Dark matter fraction within a sphere of effective radius
	log_ML_dyn_Re	$lg(M_{\odot}/L_{\odot})$	Dynamical mass-to-light ratio within effective radius
	chi2_dof		The reduced chi-square of best-fit model (The values are scaled to
			account for the effect of standard deviation of the $\chi^2$ itself,
			should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$\lg(\mathrm{M}_{\odot}/\mathrm{L}_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius
	log_Ms_rhalf	$\lg(M_{\odot}/L_{\odot})$	Enclosed stellar mass within a sphere of 3D half-light radius
	log_Md_rhalf	$\lg(M_{\odot}/L_{\odot})$	Enclosed dark matter mass within a sphere of 3D half-light radius
	MW_Gt_Re	Ig(IVI () / L())	Mass-weighted total density slope within a sphere of effective radius
	MW_Gs_Re		Mass-weighted stellar density slope within a sphere of effective radius
	MW_Gd_Re		Mass-weighted dark matter density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius
	MW_Gs_rhalf		Mass-weighted stellar density slope within a sphere of 3D half-light radius
	MW_Gd_rhalf		Mass-weighted dark matter density slope within a sphere of 3D half-light radius
	Gt_Re		Average logarithmic total density slope between 0.1 and 1 effective radius
	Gs_Re		Average logarithmic stellar density slope between 0.1 and 1 effective radius
	Gd_Re		Average logarithmic dark matter density slope between 0.1 and 1 effective radius
9	inc_deg		Best-fit inclination angle (being 90° for edge-on)
	beta_r		Best-fit radial velocity anisotropy in spherical coordinates
	log_ML_stellar	$lg(M_{\odot}/L_{\odot})$	Best-fit stellar mass-to-light ratio
	log_rho_s	$lg(M_{\odot} kpc^{-3})$	The characteristic density of gNFW profile
	rs	kpc	The break radius of gNFW profile
	gamma_gNFW	r ·	The inner density slope of gNFW profile
	kappa		The ratio between modelled line-of-sight velocity field and the observed one
	log_Mt_Re	$\lg(M_{\odot})$	Enclosed total mass within a sphere of effective radius
	log_Ms_Re	$\lg(\mathbf{M}_{\odot})$	Enclosed total mass within a sphere of effective radius  Enclosed stellar mass within a sphere of effective radius
	-		Enclosed sterial mass within a sphere of effective radius  Enclosed dark matter mass within a sphere of effective radius
	log_Md_Re	$\lg(\mathrm{M}_{\odot})$	-
	fdm_Re	1-/M /T )	Dark matter fraction within a sphere of effective radius
	log_ML_dyn_Re	$lg(M_{\odot}/L_{\odot})$	Dynamical mass-to-light ratio within effective radius
	chi2_dof		The reduced chi-square of best-fit model (The values are scaled to
			account for the effect of standard deviation of the $\chi^2$ itself,
			should be only used in the comparison between different models)
	rhalf_kpc	kpc	Radius of the sphere which encloses half the total luminosity
	log_Mt_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed total mass within a sphere of 3D half-light radius
	log_Ms_rhalf	$lg(M_{\odot}/L_{\odot})$	Enclosed stellar mass within a sphere of 3D half-light radius
	log_Md_rhalf	$\lg(\mathrm{M}_{\odot}/\mathrm{L}_{\odot})$	Enclosed dark matter mass within a sphere of 3D half-light radius
	MW_Gt_Re	2. 0, -0,	Mass-weighted total density slope within a sphere of effective radius
	MW_Gs_Re		Mass-weighted stellar density slope within a sphere of effective radius
	1.1 , , _ 05_10		1.1105 1.51100 Stellar delisity stope within a spinore of effective facility

Table 1 – continued

HDU	Parameters	Units	Description
(1)	(2)	(3)	(4)
	MW_Gd_Re		Mass-weighted dark matter density slope within a sphere of effective radius
	MW_Gt_rhalf		Mass-weighted total density slope within a sphere of 3D half-light radius
	MW_Gs_rhalf		Mass-weighted stellar density slope within a sphere of 3D half-light radius
	MW_Gd_rhalf		Mass-weighted dark matter density slope within a sphere of 3D half-light radius
	Gt_Re		Average logarithmic total density slope between 0.1 and 1 effective radius
	Gs_Re		Average logarithmic stellar density slope between 0.1 and 1 effective radius
	Gd_Re		Average logarithmic dark matter density slope between 0.1 and 1 effective radius

## REFERENCES

Planck Collaboration et al., 2016, A&A, 594, A13