

19 - 24 March 2023, Les Diablerets (Switzerland)

# **PROGRAM**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
	8:15 Welcome				
	8:30-9:15 <b>JB L1</b>	8:30-9:15 <b>MF L1</b>	8:30-9:15 <b>JB L4</b>	8:30-9:15 <b>MF L4</b>	8:30-9:15 <b>MF L5</b>
	9:15-10:00 <b>CP L1</b>	9:15-10:00 <b>JB L3</b>	9:15-10:00 <b>CP L4</b>	9:15-10:00 <b>JB L5</b>	9:15-10:00 <b>CP L5</b>
	Coffee & Posters	Coffee & Posters	Coffee & Posters	Coffee & Posters	Coffee & Posters
18:00-21:00 Registration & Welcome reception +dinner	10:30-11:15 <b>JB L2</b>	10:30-11:15 <b>MF L2</b>	10:30-11:15 <b>MF L3</b>	10:30-11:15 <b>CP HO1</b>	10:30-11:15 <b>JB L6</b>
	11:15-12:00 <b>CP L2</b>	11:15-12:00 <b>CP L3</b>	11:15-12:00 <b>JB HO2</b>	11:15-12:00 <b>CP HO2</b>	Final remarks
	Lunch*	Lunch*	Lunch*	Lunch*	
	13:30-15:00 <b>JB HO1</b>	<b>X</b> :	<b>N</b> :	<b>x</b> :	
	15:30-	Outdoor activities, networking, etc.	Outdoor activities, networking, etc.	Outdoor activities, networking, etc.	
	Social activities	<b>17:00</b> -17:30 Coffee & Posters	<b>17:00</b> -17:30 Coffee & Posters	<b>17:00</b> -17:30 Coffee & Posters	
		17:30-19:00 <b>MF HO1</b>	17:30-19:00 <b>MF HO2</b>	17:30-18:15 <b>CP HO3</b>	
				18:15-19:00 <b>CP HO4</b>	
	Dinner	Dinner	Dinner	School dinner	* Lunches are not covered

# Prof. Jérémy Blaizot (JB)

## Lectures:

JB L1 to L4: Structure formation, accretion flows, and galactic winds

JB L5 & L6: Emission from the CGM

#### Hands-on:

**JB HO1 & HO2**: Scattering experiments to interpret the observations of extended emission around galaxies (spectral shape and surface brightness profiles)

# **Prof. Céline Péroux (CP)**

### Lectures:

CP L1: Global quantities: cold gas (atomic and molecular), baryon cycle

CP L2: Basic of absorbers: Voigt profile fitting, number density, column density distribution

CP L3: Metal & Dust content: measuring metallicity, metal and dust mass densities, open issues

CP L4: Zooming on CGM: multi-phase observational signatures

**CP L5**: Future: emission, tomography, instruments

#### Hands-on:

CP HO1: General introduction to TNG/EAGLE/SIMBA API

CP HO2: Global quantities: global quantities of one halo and multiple haloes

CP HO3: Reproducing observables: surface density, emission

**CP HO4**: Predicting the baryon cycle: mass flow rates

# Prof. Michele Fumagalli (MF)

#### Lectures:

MF L1: Observing the multiphase CGM

MF L2: Observing the CGM via hydrogen/helium emission

MF L3: Observing the CGM via metal emission

MF L4: Galaxies, the CGM, and IGM: putting it all together

MF L5: The role of environment on the CGM

#### Hands-on:

MF HO1: Modeling absorption line systems (with Cloudy)

MF HO2: Emission spectra in IFU (MUSE)

# Day per day PROGRAM

Sunday - 19/03/2023	
18:00 – 21:00	Registration and welcome reception + dinner

Monday - 20/03/2023	
08:15 – 08:30	Welcome speech by the SOC
08:30 - 09:15 09:15 - 10:00	JB L1 – Structure formation, accretion flows, and galactic winds CP L1 – Global quantities: cold gas (atomic and molecular), baryon cycle
10:00 - 10:30	Coffee break & Posters
10:30 – 11:15 11:15 – 12:00	JB L2 – Structure formation, accretion flows, and galactic winds CP L2 – Basic of absorbers: Voigt profile fitting, number density, column density distribution
12:00 - 17:00	Lunch
13:30 – 15:00	JB HO1 – Scattering experiments to interpret the observations of extended emission around galaxies (spectral shape and surface brightness profiles)
15:30 – 17:30	Social activities

Tuesday - 21/03/2023	
08:30 - 09:15 09:15 - 10:00	MF L1 – Observing the multiphase CGM  JB L3 – Structure formation, accretion flows, and galactic winds
10:00 - 10:30	Coffee break & Posters
10:30 – 11:15 11:15 – 12:00	MF L2 – Observing the CGM via hydrogen/helium emission CP L3 – Metal & Dust content: measuring metallicity, metal and dust mass densities, open issues
12:00 – 17:00	Lunch / networking / outdoor activities
17:00 – 17:30	Coffee break & Posters
17:30 – 19:00	MF HO1 – Modeling absorption line systems (with Cloudy)

Wednesday - 22/03/2023		
08:30 - 09:15 09:15 - 10:00	JB L4 – Structure formation, accretion flows, and galactic winds CP L4 – Zooming on CGM: multi-phase observational signatures	
10:00 - 10:30	Coffee break & Posters	
10:30 – 11:15 11:15 – 12:00	MF L3 – Observing the CGM via metal emission  JB HO2 – Scattering experiments to interpret the observations of extended emission around galaxies (spectral shape and surface brightness profiles)	
12:00 – 17:00	Lunch / networking / outdoor activities	
17:00 – 17:30	Coffee break & Posters	
17:30 – 19:00	MF HO2 – Emission spectra in IFU (MUSE)	

Thursday - 23/03/2023	
08:30 - 09:15 09:15 - 10:00	MF L4 – Galaxies, the CGM, and IGM: putting it all together JB L5 – Emission from the CGM
10:00 - 10:30	Coffee break & Posters
10:30 – 11:15 11:15 – 12:00	CP HO1 – General introduction to TNG/EAGLE/SIMBA API CP HO2 – Global quantities: global quantities of one halo and multiple haloes
12:00 - 17:00	Lunch / networking / outdoor activities
17:00 - 17:30	Coffee break & Posters
17:30 – 18:15 18:15 – 19:00	CP HO3 – Reproducing observables: surface density, emission CP HO4 – Predicting the baryon cycle: mass flow rates
19:30 – 22:00	School dinner

Friday - 24/03/2023	
08:30 - 09:15 09:15 - 10:00	MF L5 – The role of environment on the CGM CP L5 – Future: emission, tomography, instruments
10:00 - 10:30	Coffee break & Posters
10:30 – 11:15	JB L6 – Emission from the CGM
10:00 – 10:30	Final remarks