RUM25 talks schedule

Monday 12/05/2025

Time	Speaker	Title
10:00-10:30	Registration and welcome coffee	
10:30-10:45	Welcome address and practicalities (P. Ocvirk & P.-A. Duc)	
10:45-12:00	**Session 1: Black holes and AGN feedback**	
`https://cnrs.zoom.us/j/99511105729?pwd=jlfb1gUD79kvnX7lmvVUewuLFgMyi2.1`		
	Chair: F. Rodriguez Montero, zoom officer: J. Rosdahl	
15 min	Nicholas Choustikov	A Magnetic View of AGN Feedback in Cosmological Simulations
15 min	Joseph Lewis	Can simulations quench enough early massive galaxies by boosting high-redshift black hole growth?
15 min	Mahsa Sanati	From Primordial Magnetic Fields to AGN-Driven Magnetized Outflows
15 min	Arturo Nuñez-Castiñeyra	Testing AGN feedback on the Mochima simulation
15 min	Kunyang Li	Tracking on-the-fly massive black hole binary evolution and coalescence in galaxy simulations: RAMCOAL
12:00-14:00	LUNCH	
14:00-15:30	**Session 2: Dust in Galaxy Evolution**	
`https://cnrs.zoom.us/j/92512256525?pwd=hp1IF1lZvs0Uue6CUeCxHQTbhnmEE0.1`		
	Chair: J. Devriendt, zoom officer: Y. Dubois	
15 min	Yohan Dubois	Galaxies with grains
15 min	J. K. Jang	Dust evolution in the NewCluster spin-off simulation in the high-z universe
15 min	GyeongHwan Byun	How Dust Models Shape Galaxy Morphology: Insights from the NewCluster Simulation
15 min	Diana Ismail	Bridging Simulations and Observations: Dust and Star Formation in High-Redshift Galaxies
15 min	Eric Moseley	How much does the dust-to-gas mass ratio vary in the CNM?
15 min	Francisco Rodriguez Montero	Dusty-PRISM: Predicting the evolution of dust and PAHs across cosmic time with radiation-hydrodynamics simulations of galaxy formation
15:30-16:00	Coffee break	
16:00-17:00	**Session 3: Technical Developments and Performance**	
`https://cnrs.zoom.us/j/92512256525?pwd=hp1IF1lZvs0Uue6CUeCxHQTbhnmEE0.1`		
	Chair: San Han, zoom officer: J. Chardin	
15 min	Tine Colman	RAMSES testing and OpenMP
15 min	Matthieu Kuhn	RAMSES CPU performance evaluation within the SPACE European Center of Excellence
15 min	Mei Palanque	New radiative transfer methods in numerical simulations of galaxy formation
15 min	Maxime Gressier	A hybrid neural method for Radiative Transfer in astrophysical simulations

Tuesday 13/05/2025

Time	Speaker	Title
https://cnrs.zoom.us/j/91650521072?pwd=j8BtKMRtqxAarbtYwJkAqdvwdc9DyK.1		
9:30-10:30	**Session 4: Physics of the Interstellar and Intergalactic Medium**	
	Chair: B. Das, zoom officer: N. Brucy	
15 min	Corentin Cadiou	Mischievous Ions: Non-Equilibrium Chemistry in the CGM
15 min	Jaehyun Lee	Jellyfish Galaxies in Magnetic Fields: Insights from Numerical Simulations
15 min	Prachi Khatri	Modelling molecular gas chemistry with HYACINTH
15 min	Jinsu Rhee	On the evolution of gas-stripping of galaxies in group environments
10:30-10:55	Coffee break	
10:55-12:00	**Session 5: Mini-RAMSES and SNO RAMSES**	
	Chair: T. Colman, zoom officer: N. Brucy	
30 min	R. Teyssier	Mini-RAMSES situation report, news on high-order methods
15 min	Joki Rosdahl	MHD and Cosmic Rays in miniramses
20 min	J. Blaizot	Annual report of RAMSES SNO activities
12:00-14:00	LUNCH	
14:00-15:30	**Session 6: Cosmology/Dark Matter and alternatives**	
	Chair: K. Kraljic, zoom officer: J. Freundlich	
15 min	Félix Tornatore	Study of the combined effect of baryonic physics and wCDM modification of dark energy in massive galaxy clusters
15 min	Seyoung Jeon	Born to be Starless: Revisiting the Missing Satellite Problem
15 min	Abineet Parichha	Unravelling dark matter halo dynamics: from prompt cusps to universal profiles
15 min	Emma Ayçoberry	Impact of dark energy on the thermal Sunyaev-Zel'dovich effect
15 min	Nagesh Srikanth Togere	Galaxy simulations using Phantom of Ramses code
15:15-17:00	**Session 7: Star Formation and Stellar Feedback**	
	Chair: D. Ismail, zoom officer: M. Palanque	
15 min	Gain Lee	Investigating AMR-driven Discontinuities in Cosmological Hydrodynamical Simulations
15:30-16:00	Coffee break	
15 min	Taysun Kimm	Lyman alpha properties with strong stellar feedback
15 min	Cheonsu Kang	Mitigating overcooling problem at high redshifts with sink particles
15 min	Noé Brucy	Star formation recipes at high Mach number
15 min	Nai Chieh Lin	Study of cosmic ray transport in young protostars: Impact of in-situ CR acceleration on hydrogen ionization
19:30	Dinner at the blue flamingo	

Wednesday 14/05/2025

Time	Speaker	Title
https://cnrs.zoom.us/j/99760383038?pwd=mQAHO9pWfXmGRGB42rRqnFz3WmJF5c.1		
09:30-10:30	**Session 8: From First Stars to Galaxy Evolution**	
	Chair: C. T. Nyhagen, zoom officer: J. Blaizot	
15 min	San Han	Early results from NewCluster simulation
15 min	Sukyoung Yi	Ramses Sciences at Yonsei in 2025
15 min	Anatole Storck	On the Observability of Population III stars in the MEGATRON Simulation
15 min	Jihye Shin	DARWIN: DAzzling Realization of dWarf galaxies In the Next generation of cosmological hydrodynamic simulations
10:30-11:00	Coffee break	
11:00-12:00	**Session 8 (continued)**	
	Chair: J. Lewis, zoom officer: Nagesh Srikanth Togere	
15 min	Fred Thompson	Globular Clusters: The Cosmological Context
15 min	Dominique Aubert	Updates on Dyablo for Cosmology and Reionization
15 min	Troels Haugboelle	Late infall and accretion rejuvenating protoplanetary disks
15 min	Nimatou Diallo	Cosmic rays feedback in galaxies
12:00-14:00	LUNCH	
14:00-15:00	**Session 9: Galaxy Structure and Morphology**	
	Chair: J. Freundlich, zoom officer: T. Colman	
15 min	Eric Emsellem	A view on the bars' invisible cloak
15 min	Garreth Martin	The structural diversity of simulated and observed low-mass galaxy analogues
15 min	Victor Rufo-Pastor	The formation and evolution of the circum-galactic medium in Milky Way-mass galaxies
15 min	Camilla T. Nyhagen	Investigating the early disc formation in Milky Way-mass galaxies
15:00-15:15	**Hackathon registration / organisation**	
15:15-18:00	**Informal discussion / Collaborative open space / Free afternoon**	
		NB: the meeting rooms booked for the hackathon are already available from this point on and you are welcome to use them.
15:30-18:00	SNO Board meeting	(SNO board members only)

Coming up

Hackathon sessions, register on:
https://docs.google.com/spreadsheets/d/1UBpQavbrB6JIUTBqrg8rYogirogBVWgiqI6Y6L-muKc/edit?usp=sharing

Thursday 15/05/2025

Hackathon day 1
Based on attendants' wishes as expressed on the spreadsheet.

Time	**Room A, basement main building**	**Room B, basement south building by the gate**
09:30-10:30	Miniramses tutorial, lead: R. Teyssier	yt tutorial, lead: C. Cadiou
10:30-11:00	Coffee break	
11:00-12:00	Miniramses tutorial, lead: R. Teyssier	yt tutorial, lead: C. Cadiou
12:00-14:00	LUNCH	
14:00-15:30	Porting physics modules to mini ramses, lead: R. Teyssier	Profiling and optimization, lead: T. Colman. Tutorial, usage of profiling tools on ramses and why not mini-ramses small runs
15:30-16:00	Coffee break	
16:00-17:00	Porting physics modules to mini ramses, lead: R. Teyssier	Profiling and optimization, lead: T. Colman. Tutorial, usage of profiling tools on ramses and why not mini-ramses small runs

Friday 16/05/2025

Hackathon day 2

Time	**Room A, basement main building**	**Room B, basement south building by the gate**
09:30-10:00	Ramses test suite,lead: T. Colman. Short presentation on how it works and how to add a test Local run on laptop Overview of the coverage and holes in it. Update on progress made by test suit WG Brainstorming on possible tests to add, Source test cases from participant	Freeform collaborative time
10:00-10:30	Coffee break, Observatoire seminar at 10:30	
10:30-12:00	Ramses test suite, lead: T. Colman	Freeform collaborative time
12:00-14:00	LUNCH	
14:00-16:00	Freeform collaborative time	Freeform collaborative time
16:00	RUM closing event / HdR pot in the garden	