

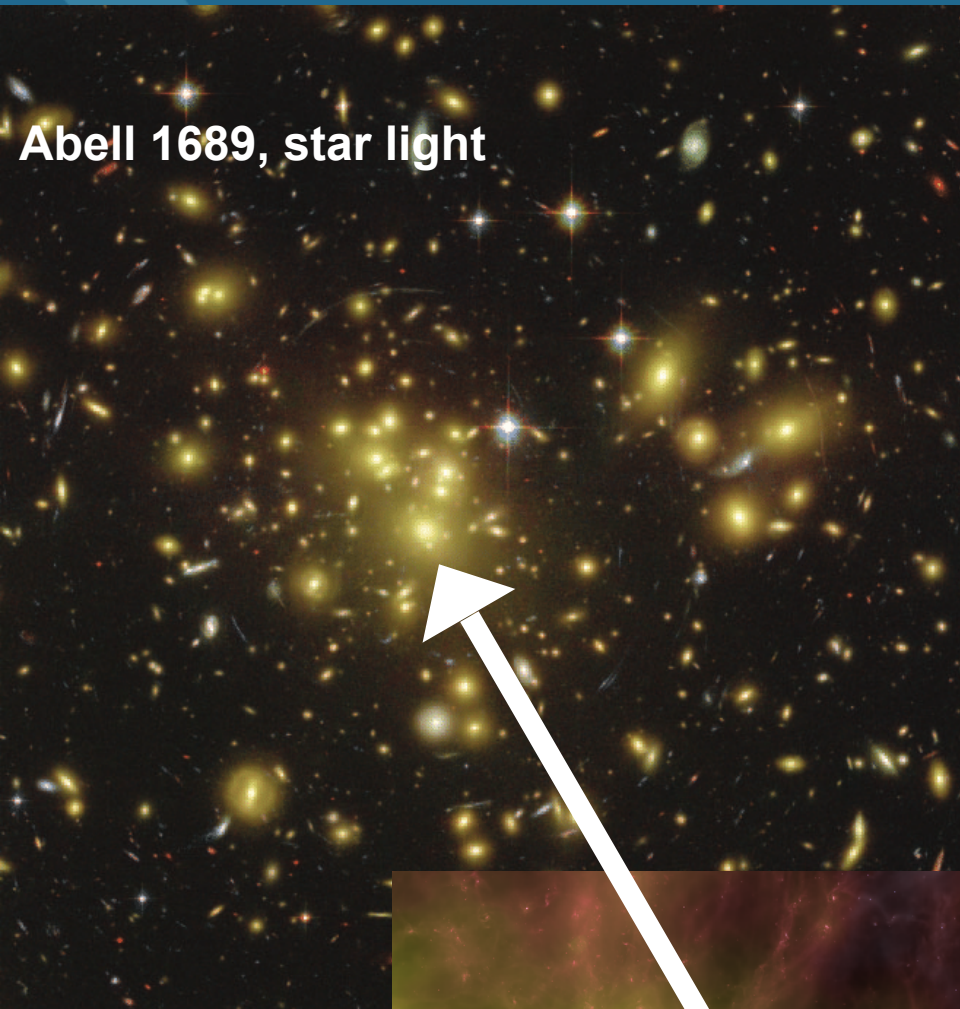


Symposium S14
**“Quenching cluster galaxies in
the cosmic middle ages”**

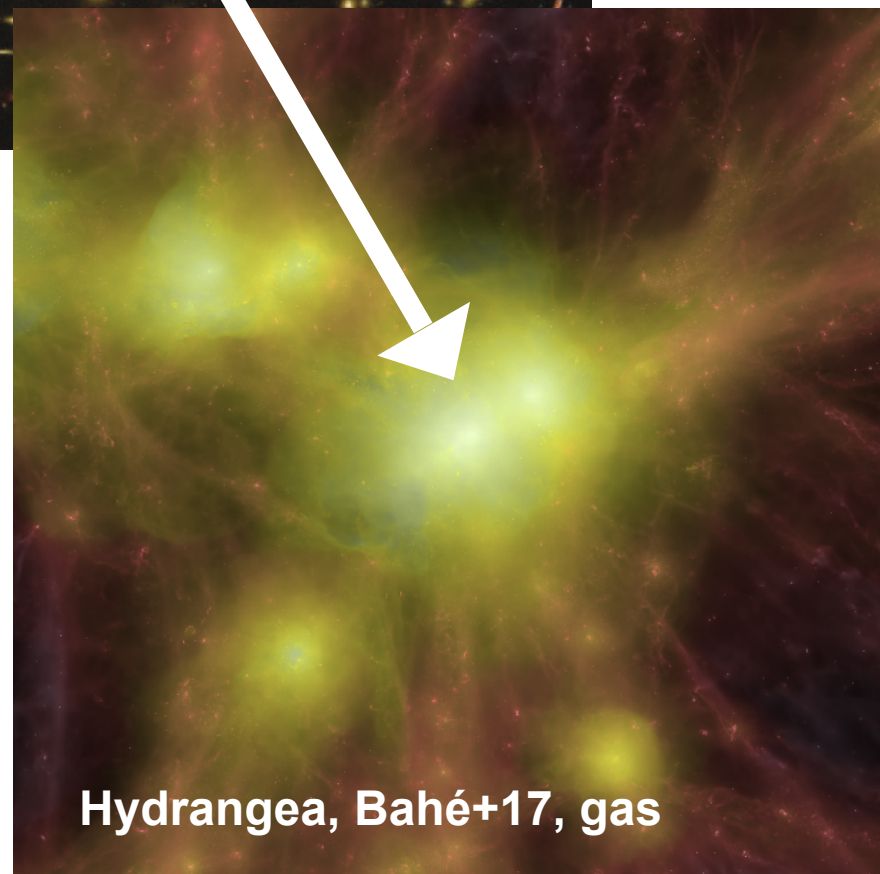
European Astronomical
Society Annual Meeting
EWASS



Rationale - Why are we here?



Abell 1689, star light



Hydrangea, Bahé+17, gas

- “Nature versus Nurture” in galaxy evolution: environment matters!
- Trends well-established in the local Universe, but less clear at high redshift. Physical impact of environment smaller in the “Cosmic Middle Ages” ($0.5 < z < 1.5$)
- Incredible progress in producing realistic galaxies with current models and simulations : Environmental effects still poorly modelled and understood
- Focus on extreme environments of galaxy groups and clusters: Quenching of star formation, effect on stellar populations, different gas phases, morphology and kinematics of the stars and gas
- Guiding themes: How do we observe and quantify environment in the Cosmic Middle Ages? What are the physical mechanisms driving environmental quenching? What other properties of galaxies are impacted? How to improve synergy between observations, and models/simulations? Expected progress with future facilities and experiments?

Abstract selection



- 40 abstracts submitted for four 1.5h blocks
- Ranking (anonymised, based on scientific rationale) of abstracts by the SOC
- 14 contributed talks (besides 4 invited talks)
- 6 flash talks
- Speakers from California to Sydney Australia (mostly Europe)

Scientific Organisers:

Yannick Bahé (co-chair)
Remco van der Burg (co-chair)
Matteo Fossati
Pascale Jablonka
Gabriella de Lucia
Annalisa Pillepich
Bianca Poggianti
Rhea-Silvia Remus

Program



Tuesday 14:30-16:00 CEST: Quantifying environment

Tuesday 16:30-18:00 CEST: Quenching, stellar populations, influence on different gas phases

Wednesday 9:00-10:30 CEST: Quenching, stellar populations, influence on different gas phases (part II)

Wednesday 14:30-16:00 CEST: Galaxy structure, morphology, kinematics

Tuesday 14:30-16:00 CEST:

Yannick Bahé & Remco van der Burg	Welcome and info
Meghan Gray	Groups, clusters, and the cosmic web (Invited review)
Ian McCarthy	Physical mechanisms affecting cluster galaxies (Invited review)
Nelvy Choque Challapa	Disruption of substructure in galaxy clusters
Matteo Bianconi	LoCuSS: exploring the connection between local environment, star formation and dust mass in galaxy cluster Abell 1758
Reza Ayromlou, Ana Paulino-Afonso	Poster flash talks (I)

Tuesday 16:30-18:00 CEST:

Bianca Iulia Ciocan, Cressida Cleland, Lyndsay Old, Luca Tortorelli	Poster flash tasks (II)
Rhea-Silvia Remus	Galaxies in the densest environments through cosmic time (Invited review)
Martina Donnari	Quenched fractions in the IllustrisTNG simulations: insights on the effects of environment and pre-processing
Veronica Strazzullo	Environmental quenching and structural evolution in massive galaxy clusters at $z \sim 1.5$
Jeffrey Chan	The effect of the environment on the buildup and structural properties of the passive galaxies at $1 < z < 1.5$
—	Summary Q&A of first two blocks

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Meghan Gray	Groups, clusters, and the cosmic environment (Invited review)
Ian McCarthy	Physical mechanisms of quenching in the densest environments through cosmic environment (invited review)
Nelvy Choque Challapa	Detailed study of the quenching of galaxies in the cosmic middle ages
Matteo Bianconi	Local environment and quenching of galaxies in clusters
Reza Ayromlou, Ana Paulino-Afonso	Poster session
—	Conferencia Strazzullo
—	Jeffrey Chan
—	Quenched fractions in the IllustrisTNG simulations: insights on the effects of environment and pre-processing
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Continuous discussion on Slack channel
Live Q&A during sessions

Code of conduct and conference guidelines

Status 16.06.2020

The EAS annual meeting is an event where researchers are encouraged to have a free discussion, and a free exchange of ideas and scientific results. All professional interactions should be conducted with consideration and respect. This includes, but is not restricted to, interactions with other attendees, exhibitors, administrative, technical or other support staff.

https://eas.unige.ch/EAS_meeting/codeconduct.jsp