

Eu**CAPT**

EuCAPT **European Consortium for Astroparticle Theory**

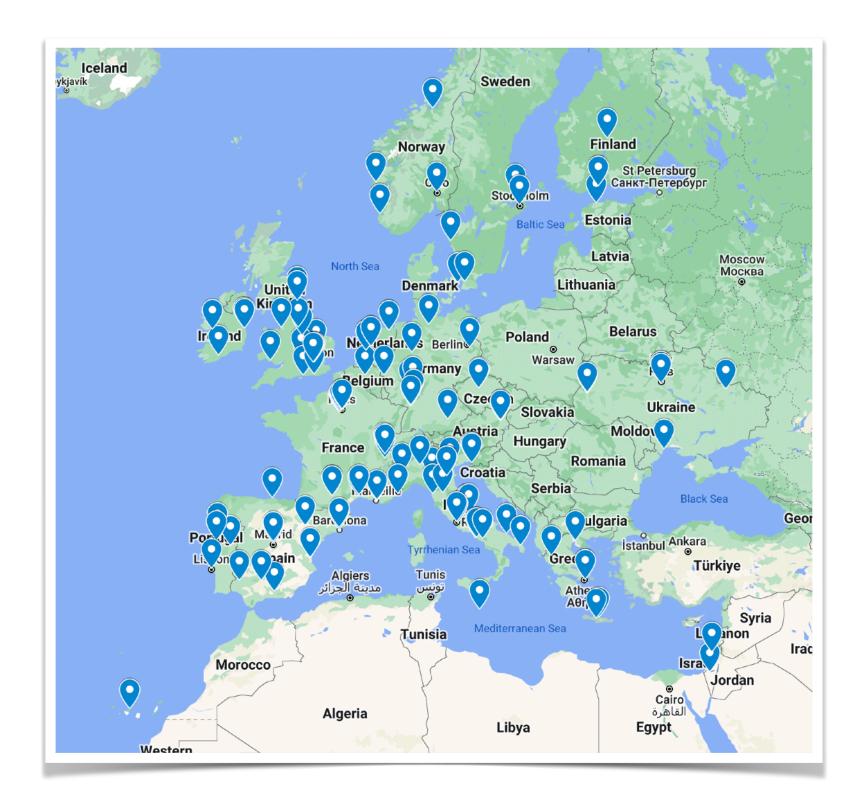


Gianfranco Bertone, 29/5/2023

Early universe	flat ACE	ЭM	Late universe
$\begin{array}{c} \text{CMB} \\ 67.4^{+0.5} \\ \text{BAO+lensing+BBN} \\ 67.4^{+1.1} \\ -1.2 \end{array}$	SnIA+Tip of the red giants (Freedman et al. 2020) 69.6±1.9		SnIA+Cepheids 74.0 ^{+1.4}
 Planck (Planck Collaboration 2018) DES+BAO+BBN (Abbott et al. 2018) SH0ES (Riess et al. 2019) H0LiCOW 2019 (this work) Late Universe (SH0ES + H0LiCOW) 			s multiply imaged $73.3^{+1.7}_{-1.8}$
		5.3 σ –	$73.8^{+1.1}_{-1.1}$
68	70	72	74
dified from Wang+ 2019	$H_0 \; [{ m kms^{-1}N}]$	$[{ m Mpc}^{-1}]$	And many o



EuCAPT Council



- First meeting 4 Oct 2022
- Second meeting 30 May 2023



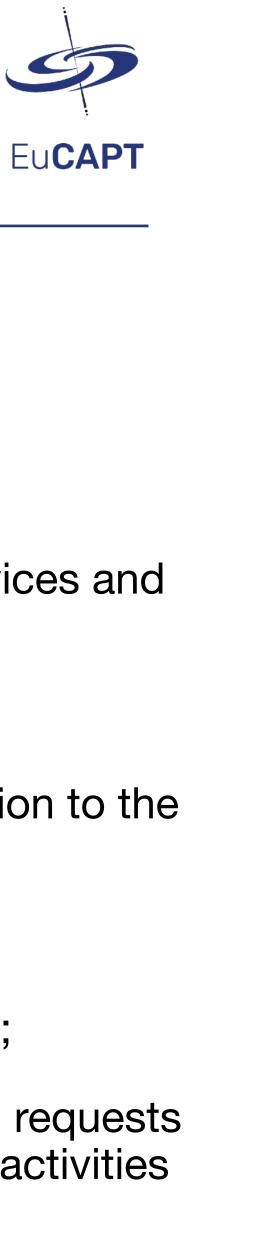
António Pestana Morais Enrico Pajer Jackson Levi Said Pedro G. Ferreira Alberto Mariotti Francesca Calore Alejandro Ibarra Paul Saffin Irene Tamborra Valerie Domcke Volodymyr Pelykh Silvia Pascoli Gert Hütsi **Pedro Schwaller** Ely Kovetz Giuseppe Fannizza Jorge Martin Camalich Riotto Antonio Katy Clough Laura Sagunski Pierre Vanhove José Ignacio Illana **Paolo PANCI** Foteini Oikonomou Carmelo Evoli Harry Desmond David J. E. Marsh (Doddy) Laura Bernard **David Langlois** Jose Alberto Ruiz Cembranos Gabriela Barenboim **Riccardo Catena** Ivonne Zavala Alessio Notari

Alvise Raccanelli Bradley J Kavanagh Sami Nurmi Jessica Turner John Antoniadis José Manuel Carmona Masina Isabella Isabella Masina Alessandra Silvestri Marco Taoso Federico Urban Isabella Masina Walter Winter **Christoph Weniger** Isabella Masina Sébastien Renaux-Petel Philipp Mertsch Ricardo Z. Ferreira Matteo R. Fasiello Masha Chernyakova Arttu Rajantie Marina Migliaccio Ilidio Lopes Tim Linden Paolo Pani Fabio locco Davide Gerosa Emanuela Dimastrogiovanni Alain Blanchard Josef Pradler Gabrijela Zaharijas Željka Marija Bošnjak Julia Becker Tjus Stefano Liberati **Geraint Pratten**

EuCAPT's director

The main tasks of the Director are:

- To chair the Steering Committee; (monthly meetings)
- To coordinate and supervise the whole range of EuCAPT activities;
- the activities of the secretarial support staff;
- To prepare annual plans and annual reports, including an overview of the activities and a financial report.
- APPEC GA meetings;
- To actively seek opportunities to support community building activities;
- of EuCAPT);
- The EuCAPT Director can create new task forces for specific actions mentioned above.



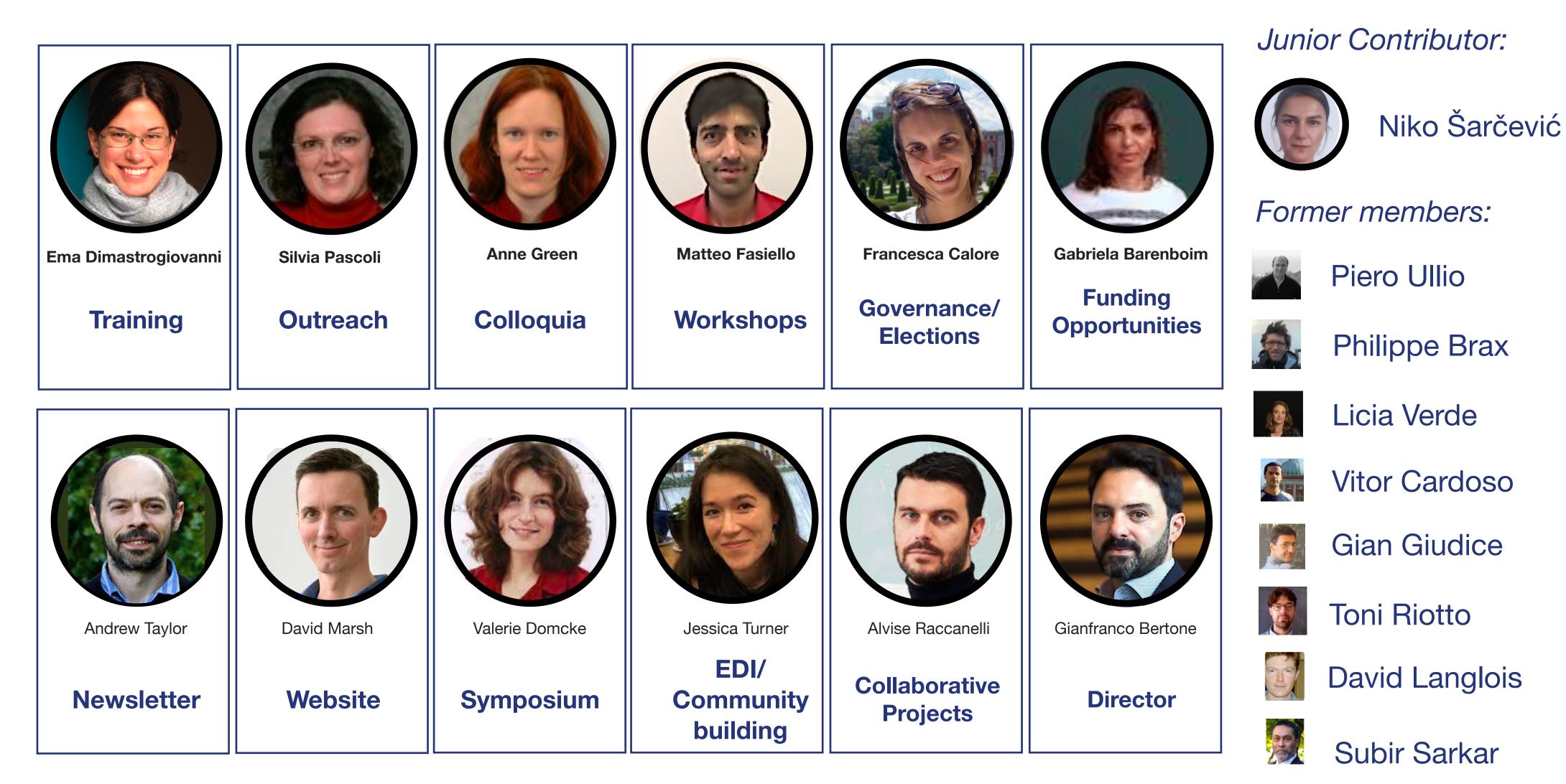
• To keep in close contact with the authorities of the central hub host about the provided support and services and

• To report twice a year to the APPEC GA about the activities of EuCAPT. The Director has a standing invitation to the

• To coordinate the application for funding instruments to support scientific meetings and staff exchanges;

• To stimulate and coordinate actions which demand a prompt reaction (for instance new physics results, requests from APPEC-SAC or requests of visits/short workshops/meeting which are not part of the annually planned activities

Steering Committee







Training

- and PhD programs, exchange programs between PhD, schools, etc.
- •Incorporate this information on the EuCAPT website.
- Plan training activities in which EuCAPT can play an active role, such as schools and, e.g., day workshops about various topics that may be useful for young researchers (grant writing, public speaking and other soft skills, etc).
- •First initiative: EuCAPT BIP Erasmus+ School



Collect and advertise on the EuCAPT website information that can be useful for young researchers such as Master



Outreach

•Aims:

- Coordinate / facilitate exchange of outreach activities
- •Sensibilize our community to importance of outreach
- •Engage with stakeholders

•Strategy:

- •Use website to advertise existing activities and as a repository of useful material
- •EuCAPT endorsement of outreach activity
- •Cosmos Prize
- •Make existing material accessible to broader audience (e.g. in other languages)

•Training:

•Training *in outreach* / coordinate with training task force

•Cosmos Prize:

•See slides tomorrow / ask me or Silvia





Colloquia

- •Organise regular online colloquia, aimed at the entire EuCAPT community (all science areas and career stages).
- •Will take place on zoom at 15.00 CE(S)T on the 2nd Tuesday of the month from Oct-Jun.
- Details will be advertised via the EuCAPT mailing list and newsletter, and also available (including slides & recordings afterwards) at: https://indico.cern.ch/category/12056/
- •Mostly 'science' topics + EDI + 'skills' (c.f. Nov 2022 talk by Matteo Rini, editor of APS Physics magazine, on 'Finding words for Physics')





Workshops

Internal criteria

- (1) A maximum number of workshops per year. Maybe $2 \le n \le 5$
- (2) A workshop on a given topic should not be sponsored in consecutive years;
- (3) Workshops in smaller Countries and in different ones w.r.t. events in previous years should be favored; (*) Offer help with gender balance in invited speakers

•Open criteria

- (1) Diversity
 - (1a) Gender balance of speakers/attendees
 - (1b) Geographical origin of speakers/attendees
 - (1c) Career stage of speakers/attendees
- (2) Dissemination/Outreach
 - (youtube possibility etc)
 - possibility)



(2a) Suggest that all efforts should be made to stream plenary talks. Offer to help with EuCAPT channels

(2b) Hold a general public event and put the recording online (their own site + EuCAPT youtube channel





- Coordinate Director's election
- Coordinate Council chair election
- Overview/redefine membership and representation rules





Funding Opportunities

- Collect and advertise on the EuCAPT website information that can be useful for young researchers such as Master and PhD programs, exchange programs between PhD, schools, etc.
- •Incorporate this information on the EuCAPT website.
- •Plan training activities in which EuCAPT can play an active role, such as schools and, e.g., day workshops about various topics that may be useful for young researchers (grant writing, public speaking and other soft skills, etc).
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Newsletter

•EuCAPT's monthly newsletter keeps the community informed of recent/upcoming theoretical astroparticle physics related developments, with a focus on Europe.



News

LIGO, Virgo and KAGRA begin fourth observation run on May 24 Awardees of the 2023 EAS Prizes announced EC report of public consultation on European RIA Programmes published

Projects

eRimote, a Horizon Europe funded project that aims to improve remote and digital access to research infrastructure ARGOS: A design study for a leading-edge radio camera for multi-messenger astrophysics

EuCAPT Member Profiles:

This month we outline the EuCAPT member profiles of Viviana Gammaldi and Matthieu Schaller.

Upcoming Workshops/Conference:

Dark Matter 2023: Smallest to Largest Scales, Santander, 29 May- 2 June 2023 Anomalies and Tensions in Cosmology, Lisbon 30 May-1 June 10 years of Gravitation and Astroparticle Physics, Amsterdam, 3-5 July 17th International Workshop on the Dark Side of the Universe, Kigali, 10-14 July COST Action COSMIC WISPers Meeting, Bari, 5-8 Sep Particle Avenues in the Dark Universe: Light Dark Sectors, Padua, 6-8 Sep Dark Energy, From Fundamental Theories to Observations, Frascati, 11-15 Sep TeV Particle Astrophysics Meeting 2023, Napoli, 11-15 Sep 2023 International Conference on Particle Physics and Cosmology, Madrid, 11-15 Sep Workshop on Theory, Phenom., and Experiments on Axions, Annecy, 25-28 Sep High Energy Phenomena in Relativistic Outflows, Paris, 23-26 Oct Gravitational Wave Probes of Fundamental Physics, Rome, 12-16 Feb 2024

Upcoming Schools in 2023:

The Transient Universe, International School, Cargèse/Corsica, 30 May- 9 June Quantum Fluids in the Universe, ISAPP school, Pisa 5-15 June Neutrino physics, astrophys. and cosm., ISAPP school, Varenna, 27 June - 6 July Here, There & Everywhere, PhD School on Neutrinos, Copenhagen, 17-21 July COSMIC WISPers in the Dark Universe, Training School, Lecce, 11-14 Sep Exploring the Dark Universe: from Particles to Galaxies, Texel Island, 13-19 Nov

Job Opportunities:

A list of 5 new job advertisements have been uploaded to the EuCAPT mattermost jobs channel this month: https://mattermost.web.cern.ch/eucapt/channels/job-ads

Lastly, we invite people to participate in a <u>survey</u> to assess community-wide opinion on the HET postdoc acceptance to fill out. The results will be collected until 31 May, 2023.



Website

•Goals:

- •To provide information on EuCAPT in an **accessible format** to the community.
- within the community.
- •To help in **cross-pollination** between different member task forces, institutions and members.
- members and funding bodies.

•Strategy:

- •Maintaining clear, up-to-date and accessible information on the website.
- •Communicating with task forces and institutions to **understand the community's needs**.
- •Presenting **profiles** of community members in the form of videos and written interviews.
- community.
- (Instagram? Youtube? Who should be responsible for this)
- •**Promote and report** on EuCAPT activities and other activities of interest to the community



•To support and encourage the community of EuCAPT members, to promote interactions and engagements

•To represent EuCAPT in a positive way to external interested parties, ranging students to prospective

•Produce timely, thematic blog posts written by experts in the community on developments in science and the

•Maintaining a social media, primarily Twitter, presence that promotes EuCAPT activities and the website



Symposium

 Collect feedback. Rethink the goals of symposium and adapt if necessary

•Clarify roles of various committees and relationship with task forces / streamline organisation structure

and advice



Collaborate with SC and task forces / collect suggestions



Collaborative Projects

- Discuss collaborative projects
- •Previous examples:
 - •White Paper
 - Software Repository





Community Building / EDI

Goal:

- cultivate a strong sense of connection and collaboration within our community of astroparticle theorists.
- understand the unique needs and interests of our members and to identify areas where we can improve, with a particular emphasis on EDI.
- build a supportive and inclusive community that can further EUCAPT's mission

In progress or done :

- update the EUCAPT Code of Conduct (https://www.eucapt.org/coc) • suggest speakers on EDI for the EUCAPT colloquium, workshops and schools

Planned :

- analyse the census data about the diversity of the EUCAPT community • act as ombudsperson for EUCAPT - contact (to be set up):





