



C4 - Joakim Edsjö, Stockholm University

C11 - Johan Rathsmann, Lund University

IUPAP = International Union of Pure and Applied Physics

IUPAP mission

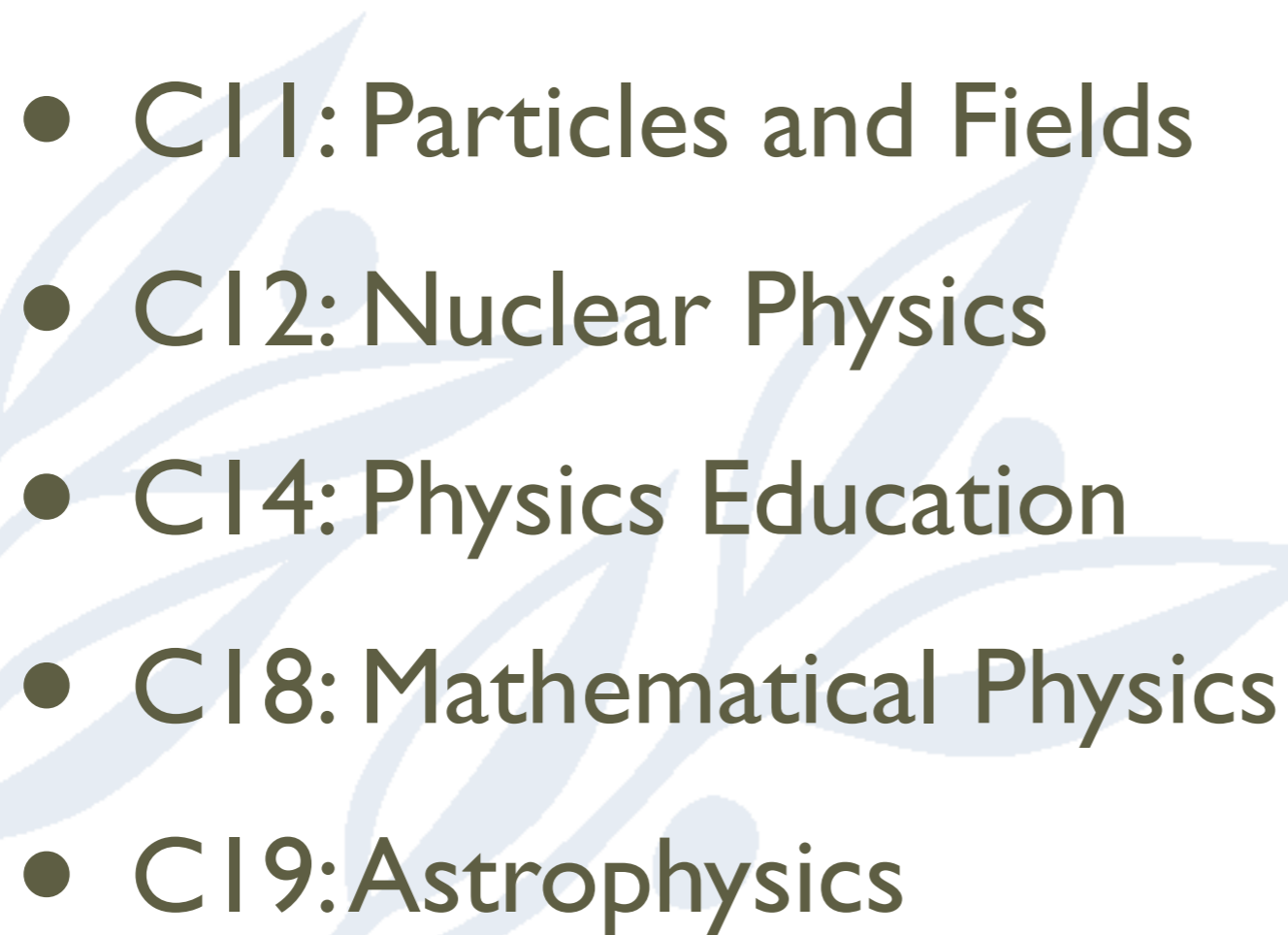
- assist in the worldwide development of physics,
- foster international cooperation in physics,
- help in the application of physics toward solving problems of concern to humanity

IUPAP aims

The aims of the Union are:

- to stimulate and promote international cooperation in physics;
- to sponsor suitable international meetings and to assist organizing committees;
- to foster the preparation and the publication of abstracts of papers and tables of physical constants;
- to promote international agreements on other use of symbols, units, nomenclature and standards;
- to foster free circulation of scientists; to encourage research and education.

Commissions (20 in total)

- C4: Astroparticle Physics
 - C11: Particles and Fields
 - C12: Nuclear Physics
 - C14: Physics Education
 - C18: Mathematical Physics
 - C19: Astrophysics
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- A decorative graphic in the bottom-left corner of the slide, consisting of several stylized, overlapping leaves in a light blue color. The leaves are arranged in a branch-like pattern, extending from the bottom-left towards the center of the slide.

C4 commission: Astroparticle Physics

- C4 was renamed from *Cosmic Rays* to *Astroparticle Physics* in 2013. Mandate:

“...to promote the exchange of information and views among the members of the international scientific community in the general field of Astroparticle Physics.”

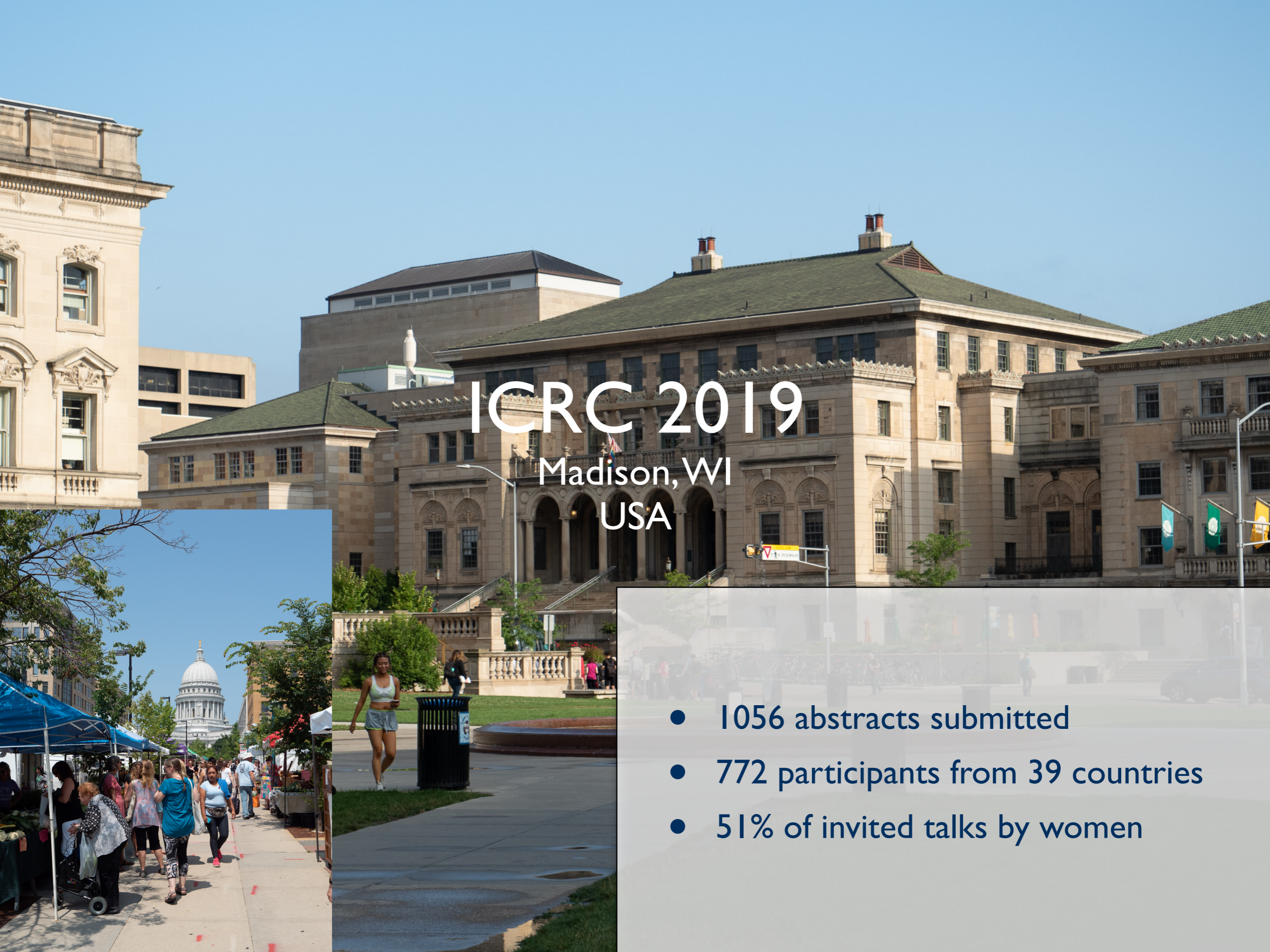
- Motivation of name change: to broaden C4 and include also e.g. dark matter
- Connects to C11 (Particles and Fields) and C19 (Astrophysics)
- Chair: Karl-Heinz Kampert (-2017), Sunil Gupta (2018-2020)
Member from Sweden: Joakim Edsjö (2018-2020)

Work in commission

- Conference support
- IAB for the ICRC conference
- Award nominations
- Newsletter to IUPAP ← **Sign up at iupap.org**
- Sometimes answer enquiries from IUPAP (e.g. data policies)
- Telecons a few times a year and face to face meetings at the ICRC conference

Conferences

- C4 can support conferences in Astroparticle Physics:
Category A: up to 11500€ for the main conference, in our case ICRC
Category B: up to 5000€ (apply to C4 Chair Sunil Gupta)
Category C: only moral support, i.e. recognition as IUAP recognized conference which often helps for receiving third party support.
- Main conference: ICRC (bi-annually).
2019: Madison, WI, USA
2021: Berlin, Germany
2023: Osaka, Japan
Important that also e.g. dark matter community participates!
- Other conferences: idm, TeVPA, TAUP, ISVHECRI, ECRS...
- Note: conferences need to follow IUPAP rules, e.g. have reasonable VISA conditions (USA is hence a bit problematic)



ICRC 2019

Madison, WI
USA

- 1056 abstracts submitted
- 772 participants from 39 countries
- 51% of invited talks by women

Awards

- C4 selects winners of several awards. This is a good way to recognize outstanding scientists (young and old), so **please nominate** (to Sunil Gupta) your excellent candidates!
- IUPAP Young Scientist Prize in Astroparticle Physics
2019: **Siyao Xu** and **Anna Nelles**
- IUPAP-TIFR Homi Bhabha Medal and Prize
2019: **Takaaki Kajita** (ICRR and University of Tokyo, Japan)
- O’Ceallaigh Medal
2019: **Piergiorgio Picozza** (University of Rome Tor Vergata and INFN, Italy)
- Shakti Duggal Award
2019: **Irene Temborra** (Niels Bohr Institute, Copenhagen, Denmark)
- Yodh Prize
2019: **Francis Halzen** (University of Wisconsin, Madison, USA)

Deadline for nomination is usually in February the year of an ICRC (2021, 2023, ...)

C4 Summary and questions

- My mandate in the C4 commission is primarily to represent our field, i.e. astroparticle physics
- I encourage more participation at ICRC
- Nominate for awards! (there are in general too few nominations, better 2019 than earlier though)
- Conference support possibility
- My mandate ends 2020, discussions for nominations for 2021–2024 should start now (nominations spring 2020, decision IUPAP general assembly October, 2020)

C11 - Particles and Fields

14 members, mandate Jan 1, 2018 – Dec 31, 2020,
Chair: Heidi Schellman, Member from Sweden: Johan Rathsmann

Governing body for ICHEP and Lepton-Photon conferences

- Decides on organizers: ICHEP 2020 Prague, Lepton-Photon 2021 Manchester, ICHEP 2022 Bologna
- Final decision ideally made at ICHEP for 4 years ahead, candidates should make proposals well before that
- Follows up planning, gets reports and gives feedback. Both on overall organisation and scientific program
- New format of Lepton-Photon to counteract dwindling participation - both parallel and poster sessions

LP 2  **I9**

Toronto, August 5-10



237 participants
parallell sessions 2 half-days
75 posters

Other tasks:

- Receives applications and proposes level of support to international conferences (\$10.000, \$5.000, \$2.000)
- Gets reports from supported conferences
- Ensures supported conferences fulfill criteria regarding: affordability, world-wide participation and gender equality
- New criterion for support - "code of conduct": ...*an environment ... free from all forms of discrimination, harassment, and retaliation...*
- Decides on bi-annual Young Particle Physicist Prizes, awarded at ICHEP - **need (coordinated) nominations before February 1, 2020**
<http://iupap.org/commissions/c11-particles-and-fields/c11-news/>

C11 Young Scientist Prize 2018



Jaroslav Trnka,
University of California, Davis

“For the discovery and exploration of new physical and mathematical principles underlying the dynamics of particle scattering amplitudes in a wide range of theories.”



Heather Gray,
Lawrence Berkeley National Laboratory

“For her broad and creative contributions as well as leadership in performance and physics analysis in the ATLAS experiment and beyond, culminating in her strong role in the searches and initial measurements of Higgs boson interactions with quarks.”

ICHEP 2020: Prague, July 30 - August 5



Nominations for IUPAP Commissions

- Joakim Edsjö and JR will step down after 2020
- New members decided by IUPAP general assembly October, 2020
- Countries nominate 6 months before
- Negotiations decide in which commissions Sweden has members (C4, C11, C12 most interested)
- Board of particle section will ask for nominations of new members in due time