

The String Theory Universe

Objectives

- Coordinate and develop stringy-inspired cross-disciplinary research activities
- Create and reinforce collaborations among quite different communities of string theorists
- Develop joint training in String Theory for ESRs and young researchers
- Promote specific actions for redressing gender imbalance in String Theory
- Disseminate results and ideas among scientists and general public
- Foster periodical contacts with experimental groups and groups outside String Theory
- Contribute to an adequate development of the fundamental scientific culture in Europe

Working Groups

- WG 1: Gauge/Gravity duality. It coordinates research on fundamental and applied aspects of the AdS/CFT correspondence.
- WG 2: String Phenomenology. It coordinates current efforts for a systematic application of String Theory models to Particle Physics phenomenology.
- WG 3: Cosmology and Quantum Gravity. It coordinates research on gravitational aspects of String Theory, including applications to Black Hole Physics and Inflation.
- WG 4: Cross-activities and exchange of knowledge. It coordinates activities of previous WGs as well as STSMs and the organization of training schools and workshops.
- WG 5: Gender issue and outreach activities. It is in charge of identifying possible strategies for improving the situation of women in String Theory. It also coordinates dissemination of Science activities.

Main Achievements

- Creation of a strictly linked network of the most active, both well-established and emergent, String Theory groups in Europe. Well-structured scientific WGs.
- International dimension: CERN involved as European Body and two groups in ZA. Groups in Argentina, Chile and the US in the process of joining the Action.
- Specific policies to increase the visibility of women scientists inside the string community, with many women in official positions inside the Action.
- Active involvement of new generations of young researchers.
- First Workshop of the Action "The String Theory Universe", held in Bern, devoted to the activities of all WGs, September 2-6, 2013.
- WG3 Workshop "Black Holes and Quantum Information Theory" at Weizmann Institute (Rehovot, IL), January 12-17, 2014.
- Representation of the Action in Career Development workshop for women in physics, Trieste, September 16-19, 2013.

Gender Balance and Early Stage Researchers

- Objectives: Redress the significant gender imbalance in String Theory. Train new talent and improve job opportunities for young researchers.
- Status: Gender forum organized during the String Workshop in Bern. More visibility of women and young scientists. Coordination of distribution of postdoctoral positions within the Action. STSMs primarily devoted to young researchers.

Dissemination

- Disseminate scientific results among a broad community of scientists. Increase attraction of the general public towards fundamental Physics. Reinforce the scientific education and attract new generations towards Science.
- Foreseen Support Measures: Organize public lectures and lectures in schools. Create a public area on the Action website.

Materials,
Physics &
Nanosciences
(MPNS)



Participating countries: 17

BE, BG, CH, DE, DK, EL, ES, FR, HU, IL, IT, MT, NL, PT, SI, SE, UK

Internat. Collaboration:

ZA, CERN (CH)

Contact details

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Action Website

www.cost.eu/domains_actions/mpns/Actions/MP1210



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