

COST Action no. MP1210

2013 | 2017

The String Theory Universe

Objectives

- Coordinate and develop stringy-inspired cross-disciplinary research activities
- Create and reinforce collaborations among different communities of string theorists
- Develop joint training in String Theory for ESRs and young researchers
- Promote specific actions for redressing gender imbalance in Theoretical Physics
- Disseminate results and ideas among scientists and general public
- 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 cross-activities of the scientific WGs, STSMs and the organization of training schools and workshops.
- WG 5: Gender issues and outreach activities. It coordinates efforts to promote the presence and participation of women in String Theory and in Physics in general. It coordinates Science outreach activities of people in the Action.

Main Achievements

- Creation of a wide and linked network of the most active String Theory groups in Europe. More than 400 scientists joined the Action in the first year.
- Strong international dimension: CERN (European Body), ZA, Chili, Argentina, US (non-COST countries). One more group in Chili and two groups in Korea in the process of joining.
- Strong women representation and participation in the Action's activities.
- Active involvement of younger researchers.
- 27 STSM awarded in first year. 89% of which to ESR.
- First Workshop of the Action "The String Theory Universe", Bern, devoted to the activities of all WGs, September 2-6, 2013.
- WG1/WG3 Workshop: "Black Holes and Quantum Information", Weizmann Institute (Rehovot, IL), January 12-17, 2014.
- WG2 Workshop: "Supersymmetry breaking in String Theory", Isaac Newton Institute (Cambridge, UK), March 10-14, 2014.
- Representation of the Action in "Career Development Workshop for Women in Physics", (Trieste, IT), September 16-19, 2013.
- Joint Postdoctoral Recruitment Meeting, Leuven, December 17-18, 2013.

Gender Balance and Early Stage Researchers

- Objectives: Redress the significant gender imbalance in String Theory. Train new talent. Improve job opportunities for young researchers.
- Status: Gender activities organized during the workshops in Bern and Weizmann. Coordination of postdoctoral recruitments within the Action. STSMs primarily devoted to ESR.

Dissemination

- Exchange of scientific results and tools in workshops and training schools.
- Dissemination of the Action in Gender Summits and related events.
- Reinforcement of the scientific education of the general public and high school pupils.

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Materials,
Physics &
Nanosciences
(MPNS)



Participating countries: 21

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

Internat. Collaboration:

ZA, CERN (CH), CL, AR, US

Contact details

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Action Website

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



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