

AI & Statistics 2012



AISTATS*2012 Call for Papers

Fifteenth International Conference on Artificial Intelligence and Statistics

April 21-23, 2012, La Palma, Canary Islands

Colocated with the MLSS Summer School (April 11-19, 2012)

Invited Speakers: *Sir David Cox, Nuffield College, Oxford*
Rien van de Weygaert, University of Groningen
Gábor Lugosi, Pompeu Fabra University

AISTATS is an interdisciplinary gathering of researchers at the intersection of computer science, artificial intelligence, machine learning, statistics, and related areas. Since its inception in 1985, the primary goal of AISTATS has been to broaden research in these fields by promoting the exchange of ideas among them. We encourage the submission of all papers which are in keeping with this objective at www.aistats.org.

In the 2012 edition of AISTATS we are particularly encouraging submissions with a focus on scientific data sets. Examples could include astronomical data, biological data etc. These submissions have been assigned the keywords "scientific data analysis".

The Conference Program will include invited talks, contributed talks, and posters. Contributed talks and posters will be selected via a rigorous double-blind peer-review process. Accepted papers will be published in the AISTATS Conference Proceedings to be published as a volume of JMLR Workshop and Conference Proceedings.

Some time at the conference will be set aside for "breaking news" posters submitted on the basis of a one-page abstract. These are reports on ongoing or unpublished projects, projects already published elsewhere, partially developed ideas, negative results etc, and are meant as informal forums to encourage discussion.

Solicited topics include, but are not limited to:

- ◆ Models and estimation (graphical models, causality, Gaussian processes, approximate inference, kernel methods, nonparametric models, statistical and computational learning theory, manifolds and embedding, sparsity and compressed sensing, ...)
- ◆ Classification, regression, density estimation, unsupervised and semi-supervised learning, clustering, topic models, ...
- ◆ Structured prediction, relational learning, logic and probability
- ◆ Reinforcement learning, planning, control
- ◆ Game theory, no-regret learning, multi-agent systems
- ◆ Algorithms and architectures for high-performance computation in AI and statistics
- ◆ Software for and applications of AI and statistics

For a more detailed list of keywords, see aistats.org/keywords.php.

Submissions will be considered if they are received by **October 14th, 2011**, 23:59 UTC. See aistats.org/submit.php for instructions.

Programme Chairs: *Mark Girolami, University College London*
Neil Lawrence, University of Sheffield