

entropy
2018

From Physics to Information Sciences and Geometry

14-16 May 2018, Barcelona, Spain

$$H(S) = - \sum p_i \log_2 p_i$$

$$D_{KL}(p||m) = \int \log(f(x))p(dx) - \int f(x) \log(f(x))p(dx)$$

$$\sum p_i \ln p_i$$

$$h_{\text{top}}(p, \log p)$$

$$H = \int_{-\infty}^{\infty} f(x) \log(f(x) \Delta x) dx$$

$$H(X; Y) = H(X|Y) + H(Y) = H(Y|X) + H(X)$$

CHAIRMAN



Ali Mohammad-Djafari
Research Director at CNRS, L2S, CentraleSupélec,
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The origin of the word "Entropy" goes back to the start of physics (thermodynamics), but since Shannon, it has become related to information theory. This conference is an opportunity to bring researchers of these two communities together and create a synergy. The main topics and sessions of the conference cover:

- Physics: classical Thermodynamics and Quantum
- Statistical physics and Bayesian computation
- Geometrical science of information, topology and metrics
- Maximum entropy principle and inference
- Kullback and Bayes or information theory and Bayesian inference
- Entropy in action (applications)

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LOCAL CHAIR



J. Miguel Rubi
Department of Condensed Matter Physics
at the University of Barcelona, Spain

CONFIRMED MAIN SPEAKERS



Ariel Caticha
University at Albany (SUNY)
Albany, NY, USA



David Wolpert
Santa Fe Institute
Santa Fe, NM, USA



Robert Niven
University of New South Wales
Sydney, Australia



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Italian National Council of Research
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DEADLINES

Early bird: 20 Mar. 2018

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