Juan García Bellido
IFT, CSIC & Universidad Autónoma de Madrid, Spain

"General Relativistic Entropic Acceleration"

By including out-of-equilibrium phenomena in General Relativity, I will show that not only energy but also entropy gradients can curve space-time. In most of the cases this effect is negligible. However, the present cosmic acceleration could be due to the entropic forces associated with the formation of the large scale structure of the cosmic web and the growth of the causal horizon, without the need to include a cosmological constant. In the near future, deep galaxy surveys will be able to distinguish General Relativistic Entropic Acceleration (GREA) from Lambda-CDM.