

Seminari de Geometria Algebraica 2016-2017

Divendres 26 de maig a les 15:00, aula T2 FMI-UB

<http://www.ub.edu/sga/>

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## EXPONENTIAL VARIETIES AND HYPERBOLIC POLYNOMIALS

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Exponential varieties arise from exponential families in statistics. These real algebraic varieties have strong positivity and convexity properties, generalizing those of toric varieties and their moment maps. Another special class, including Gaussian graphical models, are varieties of inverses of symmetric matrices satisfying linear constraints. We develop a general theory of exponential varieties, with focus on those defined by hyperbolic polynomials.

j.w. Mateusz Michałek, Bernd Sturmfels, Caroline Uhler