

COLOQUIO MATEMATICO

DEPARTAMENTO DE MATEMATICA UNIVERSIDAD DE CONCEPCION

"Newton-Okounkov bodies in Algebraic and Convex Geometry"

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Resumen:

Building on work of Okounkov from the 1990s, in 2008 Kaveh and Khovanskii, Lazarsfeld and Mustata showed how to associate to an n-dimensional algebraic variety a convex body in n-dimensional Euclidean space. The combinatorial properties of this body encode algebro-geometric properties of the variety and of line bundles on it. This construction has its origin in the notion of Newton polytope of a polynomial in n variables and extends the correspondence between convex objects and algebraic objects that arises in toric geometry. I will give an introduction on this theory and I will discuss a few applications and recent results.

Lunes 04 de Septiembre de 2017,

12:00 horas

Auditorio Prof. Alamiro Robledo H. Facultad de Ciencias Físicas y Matemáticas UNIVERSIDAD DE CONCEPCION

