

automne 2013

lundi 7 octobre
14h30 amphi B

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→ An introduction
to the theory
of heights

► The main theme of Diophantine Geometry is the description of rational or integral points on algebraic varieties in terms of the geometry of the latter. In elementary words it is the search of solutions in rational numbers for polynomial equations. The main tool is the so-called theory of heights. We will present a panorama of the various heights or *measures of arithmetic size* of points on an algebraic variety and a description of several main results and open problems in this field. Topics will include : heights à la Weil on projective spaces ; the *height machine* and applications ; heights à la Néron-Tate on elliptic curves and abelian varieties ; lower bounds for heights : problems of Lehmer, Lang and Bogomolov.



(Lm^B)