

Contact measures in isotropic spaces

Gil Solanes¹

Contact measures were introduced by Firey, and were subsequently studied by Schneider and Teufel among others, to measure the set of positions in which a moving body touches a fixed one. After revisiting this subject under the new perspective of the theory of valuations on manifolds, we will show how contact measures provide a link between the integral geometry of curved isotropic spaces and the kinematic formulas for area measures recently studied by Wannerer.

¹Department de Matemàtiques Universitat Autònoma de Barcelona 08193 Bellaterra solanes@mat.uab.cat