Geometry, Topology, and Physics Seminar

The Sarkisov program

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Friday, June 1, 2007, 4:00 p.m.
Room 6635 South Hall

Note Unusual Time

Abstract: The conjectural output of the minimal model program is either a minimal model or a Mori fibre space. Unfortunately the output in neither case is unique.

Kawamata has recently shown that any two minimal models are connected by a sequence of flops. The Sarkisov program aims to factorise any birational map between two Mori fibre spaces into a sequence of elementary links. In the case of surfaces, an elementary transformation of P^1-bundles is an example of such a link, and the Sarkisov program provides a natural framework to prove that the birational automorphism group of P^2 is generated by a Cremona transformation and PGL(3).

We describe recent work with Christopher Hacon where we extend the Sarkisov program to all dimensions.

Information about future meetings of this seminar can be found at
http://www.math.ucsb.edu/~drm/GTPseminar/