International Conference on Analysis and Geometry

August 30 – September 3, 1999, Novosibirsk, Russia

Abstracts

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Elliptics Elements in Discrete Groups

This lecture is concerned with some geometric relations between elliptic elements in a discrete Móbius group G. We consider, in particular,

1. the minimum distances between non-intersecting axes of elliptics of orders p and q for $2 \leq p, q < \infty$;

2. the minimum distances between points of H^3 stabilized by subgroups F_1, F_2 both isomorphic to A_4 or to S_4; the case where F_1, F_2 are isomorphic to A_5 was treated in a fine paper by Derevnin and Mednykh;

3. some consequences for helping determine the 3-orbifold $O = H^3/G$ of minimum hyperbolic volume.

This is joint work with G. J. Martin.