28. **Jiri Blazek and Pavel Pech**

Computer-aided investigation of sets of points in geometry

The contribution deals with (partly open) geometric problems in 3D space, which are mainly investigated by means of algebraic software like CoCoA, Maple or Singular. On a model example it is demonstrated how current computer programs may be incorporated into solution process of various geometric problems, among others how conventional synthetic approach may be supplemented by computer-aided methods. We also shortly discuss DGS programs and their possibilities in the process from formulation a hypothesis to its verification or disproval. Finally, we mention history of some famous geometric problems and their transformations and reformulations caused by CAS and DGS programs appearing in 1990s.