

Computing loci with GeoGebra-Discovery: some issues and suggestions

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Abstract. In our contribution, we discuss the current performance of the GeoGebra Discovery `LocusEquation` command, which automatically outputs where to place some point in a construction so that a given property is satisfied. We will show some examples of unexpected output of this command, regarding different computational or interpretative issues (number of conditions, non-principal locus ideals, nondegeneracy conditions, etc.). Then we focus on the proposal of some theoretical and algorithmic recommendations to improve the performance of this `LocusEquation` command.