1117-52-316   **Wöden Kusner*** (`wkusner@gmail.com`), Graz University of Technology, Institute for Analysis and Number Theory, Steyrergasse 30/II, Graz, 8010. *Configurations of points with respect to discrepancy and uniform distribution.* Preliminary report.

In the theory of uniform distribution, one important measure of the quality of a point set is its discrepancy. This quantifies how well the counting measure of a point set can approximate volume with respect to some collection of regions. For the purposes of Quasi-Monte Carlo integration, we would like to find point sets with low discrepancy. We'll look at the implementation of some algorithms for explicitly computing discrepancy, analyze some problems related to high quality point sets in the compact setting and discuss some of the open questions that go with them. (Received January 17, 2016)