1163-14-1378   **Cordian B Riener*** (`cordian.riener@uit.no`), UiT University, 9007 Tromsoe, Norway, and
Sebastian Debus. *Polynomial opzimization problems invariant by finite reflection
groups.* Preliminary report.

We consider polynomial optimization problems invariant by finite reflection groups. These groups are related in a beautiful way to combinatorics and the corresponding invariant theory and representation theory can be well understood combinatorically. In the talk, we will present some results on sums of squares representations in this setup and show some more general results which enable to reduce the complexity in polynomial optimization in the context of functions invariant by these groups (Received September 15, 2020)