- **Kröncke, Klaus: Perelman's entropy functionals for manifolds with conical singularities (205)**
  In this talk we discuss Perelman's Lambda-functional as well as shrinker and the expander entropy on a class of manifolds with isolated conical singularities. On such manifolds, a singular Ricci de Turck flow preserving the isolated conical singularities exists. We prove that the entropies are monotonous along the singular Ricci de Turck flow. We employ these entropies to show that in the singular setting, under a curvature condition on the cross section, Ricci solitons are gradient and that steady or expanding Ricci solitons are Einstein. This is joint work with Boris Vertman.