

* Electronic Address: ecker@math.fu-berlin.de

¹ Free University of Berlin

**Local monotonicity and mean value formulas for some
nonlinear diffusion equations**

Klaus Ecker^{1*}

We present methods for construction of global and local quantities (Lyapunor type functionals) for certain nonlinear diffusion equations. These quantities behave monotonically with respect to time or a space-time scaling parameter.