

1126-35-41

**Carla Cederbaum\*** ([cederbaum@math.uni-tuebingen.de](mailto:cederbaum@math.uni-tuebingen.de)), Fachbereich Mathematik, Auf der Morgenstelle 10, 72070 Tuebingen, Germany. *On foliations related to the center of mass in General Relativity.*

We will discuss new developments in the analysis of asymptotic foliations by prescribed curvature in relativistic initial data sets with prescribed asymptotic decay, generalizing results by Huisken and Yau. We will relate these foliations to the definition of the center of mass of the initial data sets under consideration. The results presented are joint work with Cortier–Sakovich and with Nerz. (Received December 15, 2016)