

Self-gravitating massive fields: stability, decay, and regularity

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I will present recent advances on the formulation and resolution of the global evolution problem for self-gravitating massive matter fields: design of asymptotically flat initial data sets, nonlinear stability of fluid flows under symmetry conditions, and nonlinear stability of massive fields near Minkowski spacetime. Joint work with T.-C. Nguyen, Y. Ma, B. LeFloch, and G. Veneziano.