

Abstract Submitted
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Generalized axisymmetric models of self-gravitating systems SIMONETTA FILIPPI, CHRISTIAN CHERUBINI, REMO RUFFINI, ALONSO SEPULVEDA, Facoltà di Ingegneria, Università Campus Bio-Medico, and ICRA — Non-homogeneous axisymmetric models of self-gravitating systems are discussed by using functional methods and integrability conditions are established in the case of barotropic and baroclinic configurations. For various velocity profiles, in the case of polytropic index $n=1$, analytic approaches are tempted by using the matching technique developed by Williams in 1987 in order to find the density profile and in particular the configuration's surface.

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