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Abstracts of Short Communications and Posters

Section:

9. Ordinary Differential Equations and Dynamical Systems

1991 MS Classification: 34C35, 13P10, 68Q40
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Orbit space reduction
In equivariant dynamical systems investigations are done modulo a group action. One method of ruling out the group action is by studying an alternative system of differential equations on the orbit space. These differential equations are derived as derivatives of fundamental invariants of the invariant ring which serve as coordinates of the orbit space. We study special choices of the coordinates in order to bring the system into a special form reflecting best the structure. As example the Taylor Couette problem is considered.