



Asymptotic Stability of Dissipated Hamilton-Poisson Systems

Petre Birtea, Dan Comănescu

(Submitted on 21 Jul 2011)

We will further develop the study of the dissipation for a Hamilton-Poisson system introduced in [2]. We will give a tensorial form of this dissipation and show that it preserves the Hamiltonian function but not the Poisson geometry of the initial Hamilton-Poisson system. We will give precise results about asymptotic stabilizability of the stable equilibria of the initial Hamilton-Poisson system.

Subjects: **Dynamical Systems (math.DS)**

MSC classes: 37C10, 37C75, 70E50

Cite as: **arXiv:1107.4231 [math.DS]**

(or **arXiv:1107.4231v1 [math.DS]** for this version)

Submission history

From: Petre Birtea [[view email](#)]

[v1] Thu, 21 Jul 2011 10:53:59 GMT (18kb)

[Which authors of this paper are endorsers?](#)

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

math.DS

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1107](#)

Change to browse by:

[math](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))

