

# On the Associativity of Gluing

Lizhen Qin

(Submitted on 27 Jul 2011)

This paper studies the associativity of gluing of trajectories in Morse theory. We show that the associativity of gluing follows from the existence of compatible manifold with face structures on the compactified moduli spaces. Using our previous work, we obtain the associativity of gluing in certain cases.

In particular, associativity holds when the ambient manifold is compact and the vector field is Morse-Smale.

Subjects: **Geometric Topology (math.GT)**; Symplectic Geometry (math.SG)Cite as: **arXiv:1107.5527 [math.GT]**(or **arXiv:1107.5527v1 [math.GT]** for this version)

## Submission history

From: Lizhen Qin [[view email](#)]

[v1] Wed, 27 Jul 2011 16:32:41 GMT (20kb)

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

## Download:

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

## Current browse context:

math.GT

[< prev](#) | [next >](#)[new](#) | [recent](#) | [1107](#)

## Change to browse by:

[math](#)[math.SG](#)

## References & Citations

- [NASA ADS](#)

## 1 blog link

(what is this?)

## Bookmark

(what is this?)Science  
WISE