



Mathematics > Differential Geometry

Thin instantons in G_2 -manifolds and Seiberg-Witten invariants

Naichung Conan Leung, Xiaowei Wang, Ke Zhu

(Submitted on 11 Jul 2011 (v1), last revised 8 Nov 2011 (this version, v2))

For two nearby disjoint coassociative submanifolds C and C' in a G_2 -manifold, we construct thin instantons with boundaries lying on C and C' from regular J-holomorphic curves in C . We explain their relationship with the Seiberg-Witten invariants for C .

Comments: 67 pages, expanded details and improved exposition, submitted version. arXiv admin note: substantial text overlap with [arXiv:math/0401419](#)

Subjects: **Differential Geometry (math.DG)**; Mathematical Physics (math-ph); Symplectic Geometry (math.SG)

MSC classes: 53C07 (Primary) 53D40, 81T30 (Secondary)

Cite as: [arXiv:1107.1947v2](#) [math.DG]

Submission history

From: Ke Zhu [[view email](#)]

[v1] Mon, 11 Jul 2011 07:01:53 GMT (50kb)

[v2] Tue, 8 Nov 2011 03:10:14 GMT (53kb)

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

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

Download:

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

Current browse context:

math.DG

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

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

Change to browse by:

[math](#)

[math-ph](#)

[math.SG](#)

References & Citations

- [NASA ADS](#)

Bookmark (what is this?)

