



Mathematics > Geometric Topology

The minimal genus problem for elliptic surfaces

[M. J. D. Hamilton](#)

(Submitted on 6 Jun 2012)

We partly solve the minimal genus problem for embedded surfaces in the case of elliptic 4-manifolds. This involves a certain restricted transitivity property of the action of the orientation preserving diffeomorphism group on the second homology. In all cases we consider we get the minimal possible genus allowed by the adjunction inequality.

Comments: 9 pages

Subjects: **Geometric Topology (math.GT)**; Algebraic Geometry (math.AG)

MSC classes: Primary 14J27, 57N13, 57R95, Secondary 57R57

Cite as: [arXiv:1206.1260 \[math.GT\]](#)

(or [arXiv:1206.1260v1 \[math.GT\]](#) for this version)

Submission history

From: Mark John David Hamilton [[view email](#)]

[v1] Wed, 6 Jun 2012 16:01:33 GMT (8kb)

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

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

Download:

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

Current browse context:

[math.GT](#)

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

[new](#) | [recent](#) | [1206](#)

Change to browse by:

[math](#)

[math.AG](#)

References & Citations

- [NASA ADS](#)

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

