



# Special Lagrangian 4-folds with $SO(2) \times S_3$ -Symmetry in Complex Space Forms

Franki Dillen, [Christine Scharlach](#), [Kristof Schoels](#), [Luc Vrancken](#)

(Submitted on 5 Jul 2011)

In this article we obtain a classification of special Lagrangian submanifolds in complex space forms subject to an  $SO(2) \times S_3$ -symmetry on the second fundamental form. The algebraic structure of this form has been obtained by Marianty Ionel. However, the classification of special Lagrangian submanifolds in  $\mathbb{C}^4$  having this  $SO(2) \times S_3$  symmetry in that paper is incomplete. In the present paper we give a complete classification of such submanifolds, and extend the classification to special Lagrangian submanifolds of arbitrary complex space forms with  $SO(2) \times S_3$ -symmetry.

Subjects: **Differential Geometry (math.DG)**; Symplectic Geometry (math.SG)

MSC classes: 53D12, 53B25

Cite as: [arXiv:1107.0855](#) [math.DG]

(or [arXiv:1107.0855v1](#) [math.DG] for this version)

## Submission history

From: Franki Dillen [[view email](#)]

[v1] Tue, 5 Jul 2011 12:12:10 GMT (18kb)

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