



# Marco Kühnel

## Harmonicity in the presence of complex structures

**TIME:**

22 Nov 2005, 17:00 - 19:00

**LOCATION:**

Freie Universität Berlin - Fachbereich Mathematik und Informatik  
Arnimallee 2-6, 14195 Berlin-Dahlem (Raum 031)

The problem of defining harmonic maps in the presence of complex structures is discussed. First we follow a proposal of Jost and Yau in the case of a complex structure on the preimage manifold and give an existence and uniqueness result. The discussion of examples will suggest properties of so-called 'hermitian-harmonic maps' quite different from the real harmonic situation. So we propose to pursue a different approach.

**Contact:**

Humboldt-Universität zu Berlin . Institut für Mathematik  
SFB 647 . Unter den Linden 6 . 10099 Berlin  
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727  
sfb647@math.hu-berlin.de

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