



Institut für
Angewandte Mathematik



Leibniz
Universität
Hannover

Institut für Angewandte Mathematik
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Oberseminar Analysis und Theoretische Physik

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“On the Cauchy Problem for a Two-Component Degasperis-Procesi System”

Abstract:

This talk is concerned with the Cauchy problem for a two-component Degasperis-Procesi system which is the Hamiltonian extension of the celebrated Degasperis-Procesi equation. Making use of the Littlewood-Paley decomposition and the transport equation theory, we first establish the local well-posedness of the system in Besov spaces, and then derive the precise blow-up scenario for strong solutions to the system. In addition, two new blow-up criteria with respect to initial data and the exact blow-up rate of strong solutions to the system are presented. Finally, some further problems for the system are also proposed.

Dienstag, 22.01.2013, 15:00 Uhr, Raum g005
Hauptgebäude der Universität

Über Ihren Besuch würden sich freuen:

Prof. Dr. Joachim Escher
Prof. Dr. Olaf Lechtenfeld
Prof. Dr. Elmar Schrohe
Prof. Dr. Christoph Walker