Analysis and Applied Mathematics Seminar

On the variational properties of KdV multisolitons

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Abstract: We characterize 2-soliton solutions of the Korteweg-de Vries equation as global minimizers for a constrained variational problem. In particular this gives a nice proof of their stability. The proof uses the so-called profile decomposition or bubble decomposition of a bounded sequence in Sobolev space.

Monday, October 29 at 4:00 PM in 636 SEO