Friday, July 31st (at 3.00pm, UK time)

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Title: *Multi-solitons of the half-wave maps equation and Calogero-Moser spin-pole dynamics*

ABSTRACT

The half-waves map (HWM) equation is a recently-introduced nonlocal analog of the Heisenberg ferromagnet equation. Though this equation is understood to be integrable (by virtue of a Lax pair), only traveling wave soliton solutions have been presented in the literature.

We derive exact multi-soliton solutions of the HWM equation and show that they are governed by a complexified spin Calogero-Moser system.