## Integrable Systems in Geometry and Mathematical Physics, Conference in Memory of Boris Dubrovin (online, 28 June to 2 July 2021)



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## **Numerical Study of Davey-Stewartson systems**

Monday, June 28, 2021 11:30 AM (40 minutes)

We present a detailed numerical study of solutions to Davey-Stewartson (DS) systems, nonlocal nonlinear Schrödinger equations in two spatial dimensions. A possible blow-up of solutions is studied, a conjecture for a selfsimilar blow-up is formulated. In the integrable cases, numerical and hybrid approaches for the inverse scattering are presented. We comment on DS II and DS I systems.

**Primary author:** Prof. KLEIN, Christian (Université de Bourgogne)

Presenter: Prof. KLEIN, Christian (Université de Bourgogne)