



Lehrstuhl für Analysis und Modellierung

**Lehrstuhl-Seminar
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Comment on the Space-Time Resonances Approach and Normal Form Transforms

29. Juni 2018 - 11:00

Seminarraum IADM 8.526, Pfaffenwaldring 57

Abstract: The space-time resonances approach was used by Germain, Masmoudi and Shatah to prove statements about global existence of solutions to some non-linear PDEs for small initial data. In this talk I will give a short introduction to the ideas behind this approach by an example and show some connections to the application of a normal form transform. Finally, I will briefly sketch out how this was used by Germain, Masmoudi, Shatah in 2010 to prove global existence for solutions to the NLS with a certain quadratic non-linear part and small initial data.

My talk is essentially based on the talk of D. Lannes in the séminaire Bourbaki.