SEMPARIS – Séminaires en région parisienne

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TBA

Jeudi 23 Novembre 2017, 14 :30
IHES, Amphithéâtre Léon Motchane
Domaines : hep-th

Titre : *Differential operators with meromorphic eigenfunctions and indefinite scalar products (Based on joint works with S.P. Novikov and R.G. Novikov)*

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Résumé : *Meromorphic solutions of soliton equations usually do not fit in the standard spectral transform scheme. We show, that the spectral theory for the corresponding linear problems should be formulated in terms of Pontrjagin spaces - pseudo-Hilbert spaces with a finite number of negative squares. This observation uses the following property : all eigenfucntions of these linear operators with special singularities are meromorphic for all values of spectral parameter.*

We also discuss a two-dimensional analog of this property.