

SEMINÁŘ OTF ÚJF, ŘEŽ

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**Pseudo-hermitian deformation
of Quantum systems**

Abstrakt

Recent developments in the study of PT symmetric and pseudo-hermitian quantum system will be reviewed. A general method for constructing pseudo-hermitian quantum system from the deformation of known hermitian system will be presented. The metrics in the Hilbert spaces of the corresponding pseudo-hermitian systems are known in closed form. Several examples from non-relativistic, relativistic and supersymmetric quantum systems will be considered. Pseudo-hermitian deformation of Dicke model, spin-chains and models admitting topological insulator phases will be presented.

**Seminář se koná v pátek 19. 4. 2013 v 10:30 hod.
v zasedací místnosti ÚJF Řež**

A. Cieplý/otf