

Solitonic analogs of Nielsen-Olesen strings

Wednesday 30 September 2015 17:20 (15 minutes)

First I will give a short comparison of topological defects and topological solitons for various space dimensions ($D=1,2,3$).

Then I will discuss properties of 2-dimensional solitons for

$U(1)$ gauged easy-axis Heisenberg antiferromagnet, compare these

solitons both with 2D Nielsen-Olesen strings in the Abelian Higgs model and with 2D Belavin-Polyakov solitons in isotropic antiferromagnet model - and will show their dynamical stability.

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