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## Effect of phase transition on spin transport in quantum frustrated antiferromagnets

**Leonardo dos Santos Lima**

Centro Federal de Educação Tecnológica de Minas Gerais, Brazil

We use the SU(3) Schwinger's boson theory to study the spin transport properties of two-dimensional anisotropic frustrated Heisenberg model at  $T=0$ . We have investigated the behavior of the spin conductivity in different frustrated spin systems that presents exchange interactions  $J_1$ ,  $J_2$  and  $J_3$ . We have studied the spin transport in the Bose-Einstein condensation regime where the bosons are condensed. Our results show an influence of the quantum phase transition point on the spin conductivity behavior. We also have made a diagrammatic expansion for the green-function and do not have obtained any significative change on the results.

### Biography

Leonardo dos Santos Lima has completed his PhD from Federal University of Minas Gerais, Brazil and Postdoctoral studies from Technische Universität Kaiserslautern, Germany. He has published more than 35 papers in reputed journals.

lslima7@yahoo.com.br

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