



# Physikalisches Kolloquium

**Henri Godfrin, CNRS Grenoble**

**»Helium-Three Fermi Liquid: new results in a model quantum system«**

*Einführung: H. v. Löhneysen*

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Liquid  $^3\text{He}$  is a well known model isotropic Fermi Liquid. The Landau parameters, determined from thermodynamical measurements as a function of the molar volume, were thought to be well known. This is not the case! Our measurements give a much lower effective Fermi temperature than former results. Also, the analysis of specific heat measurements with the PLTS-2000 temperature scale yields a substantial effective mass increase. Contrarily to former measurements, the  $F_0a$  density dependence does not show accidents, or a saturation at high pressures, and the new data admit an excellent fit with density functional theories. Important conclusions can be drawn on the nature of the strongly interacting Fermi Liquid.

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**Freitag, 30.05.2008, 17 Uhr c.t.,**

**Universität Karlsruhe (TH), Otto-Lehmann-Hörsaal, Physik-Flachbau (Geb. 30.22).**

**Anschließend Nachsitzung im Gastdozentenhaus „Heinrich Hertz“**