# Department of Theoretical Physics

## Free Meson Seminar

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| *Speaker* | : | Vinod Chandra Joshi |
| *Topic* | : | A quasi-particle description of (2+1)-flavor lattice QCD equation of state |
| *Day, Date & Time* | : | Thursday, October 7, 2010 at 2:30 p.m. |
| *Place* | : | AG 69 |

*Abstract*

A quasi-particle description has been proposed to interpret recent lattice data on (2+1)-flavour hot QCD equation of state (EOS). The description is based on mapping the non-ideal (interacting) part of the EOS in to effective fugacities for quasi-gluons and quasi-quarks. As implications of the model, we study, a Virial expansion for hot QCD which highlights the role of interactions, and temperature dependence of the bulk viscosity.

*(Nilmani Mathur)*