**REGULARITY OF WEAK SOLUTION FOR THE NAVIER - STOKES EQUATIONS VIA ENERGY CRITERIA**

Vu Thi Thuy Duong

Thai Nguyen University, Thai Nguyen, Vietnam

**Abstract:** This talk is based on the work ofR. Farwig, H. Kozono and H. Sohr. Consider a weak solution *u* of the instationary Navier - Stokes system in a bounded domain  satisfying the strong energy inequality. In this talk, we explain the proof of the fact that *u* is regular if either the kinetic energy  or the dissipation energy  is left-side continuous as a function of the time *t* with  exponent  and with sufficiently small  seminorm. The proof uses local regularity results which are based on the theory of very weak solutions and on uniqueness arguments for weak solutions.