1044-35-120 Norimichi Hirano\* (hirano@math.sci.ynu.ac.jp), Tokiwadai, Hodogayaku, Yokohama, Kanagawa 240-8501, Japan. Multiple Existence of Nonradial Positive Solutions for a Coupled Nonlinear Schrödinger System.

In this talk, we consider the multiple existence of nonradial positive solutions of coupled Schrödinger system

$$\begin{cases} -\Delta u + \mu_1 u = u^3 + \beta u v^2 & \text{in } \mathbb{R}^3 \\ -\Delta v + \mu_2 v = v^3 + \beta u^2 v & \text{in } \mathbb{R}^3 \end{cases}$$
(P)

where  $\mu_1, \mu_2 > 0$  and  $\beta < 0$ .

It is known that the solutions of (P) is not necessarily radial(Lin and Wei, 2005). We show that problem (P) has multiple nonradial solutions in case that  $|\beta|$  is sufficiently small. (Received August 27, 2008)