

**Meeting:** 998, Houston, Texas, SS 4A, Special Session on Nonlinear Analysis

998-35-283      **Hossein T Tehrani\*** ([tehranih@unlv.nevada.edu](mailto:tehranih@unlv.nevada.edu)), Department of Mathematical Sciences, 4505 Maryland Parkway, Box 454020, Las Vegas, NV 89154. *On a Resonant Schrodinger Equation in  $R^N$  with Unbounded Nonlinearities.*

We consider an equation of the form

$$-\Delta u + V(x)u = -\lambda u + a(x)g(u) + h(x) \quad x \in R^N$$

where  $-\lambda$  belongs to the (point) spectrum of the Schrodinger operator, so that the problem is at resonance. In addition  $a(x)$  is a continuous function changing sign in  $R^N$ , and  $g(u)$  has a sublinear growth at infinity. We prove existence results under a general Landesman-Lazer type condition. (Received March 01, 2004)