1019-35-73Hossein T. Tehrani\* (tehranih@unlv.nevada.edu) and David G. Costa. Semilinear<br/>Equations with Logistic Type Nonlinearities and Constant Yield Harvesting in  $\mathbb{R}^N$ .In this talk we consider the question of existence of positive solutions to the equation:

$$-\Delta u = a(x) \left( \lambda u - g(u) \right) - \mu h(x) \qquad x \in \mathbb{R}^N$$

where positive functions a(x) and h(x) satisfy suitable integrability conditions and the nonlinearity has a logistic-type growth. Existence of a positive solution is considered for a range of the harvesting parameter  $\mu$ . (Received August 05, 2006)