1084-16-163 **Nguyen Viet Dung*** (nguyend2@ohio.edu), Department of Mathematics, Ohio University, Zanesville Campus, Zanesville, OH 43701. *Tilting modules and pure semisimple rings.*

A ring R is called left pure semisimple if every left R-module is a direct sum of finitely generated modules, or equivalently, if every left R-module is pure-injective. It is well known that left and right pure semisimple rings are precisely rings of finite representation type, and it is still an open problem whether left pure semisimple rings always have finite representation type. A finitely generated left R-module M is a tilting module if the class $\mathrm{Gen}(M)$ of all left R-modules generated by M coincides with the class $M^{\perp}$ of all left R-modules X that satisfy $Ext^1_R(M, X) = 0$. In this talk, we focus on the class of left pure semisimple hereditary rings R, and describe the distribution of indecomposable left R-modules over such a ring R. We show that the tilting property of certain finitely generated modules and properties of their endomorphism rings give useful information about the category of finitely generated left R-modules. In particular, we discuss the endofiniteness of indecomposable left R-modules. (This is joint work with José Luis García, University of Murcia, Spain) (Received August 30, 2012)