1053-13-185 **Yongwei Yao*** (yyao@gsu.edu), Department of Mathematics and Statistics, Georgia State University, Atlanta, GA 30303. *The linear growth property of* Tor *modules.* Preliminary report.

Let R be a Noetherian ring, I and J be ideals of R, and M and N be finitely generated R-modules. The *linear growth property* (for the primary decomposition) has been proved for $\{M/I^nM\}_{n=1}^{\infty}$, and later for $\{\mathrm{Tor}_c^R(N, M/I^nM)\}_{n=1}^{\infty}$ and $\{\mathrm{Ext}_R^c(N, M/I^nM)\}_{n=1}^{\infty}$, in which c is any fixed integer. In this talk, I will talk about the linear growth property of $\{\mathrm{Tor}_c^R(M/I^mM, N/J^nN)\}_{m,\,n=1}^{\infty}$ with c fixed. (Received September 02, 2009)