

1051-13-252

Hamid Rahmati*, Texas Tech University, Department of Mathematics and Statistic, Lubbock, TX 79409, and **Frank Moore**. *Standard systems of parameters and rings with finite local cohomology*. Preliminary report.

Let (R, \mathfrak{m}) be a local commutative noetherian ring. It is known that the local cohomology modules $H_{\mathfrak{m}}^i(R)$, for $i < \dim R$, are finitely generated if and only if there exists an integer n such that every system of parameters $\underline{x} = x_1, \dots, x_d$ in \mathfrak{m}^n is standard, that is to say \underline{x} satisfies

$$(\underline{x}) H_{\mathfrak{m}}^i(R/(x_1, \dots, x_j)) = 0$$

for all non-negative integers i, j with $i + j < d$. We give an upper bound for the smallest n with this property. (Received August 25, 2009)