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Thomas Marley* (tmarley@math.unl.edu), Department of Mathematics, University of Nebraska-Lincoln, Lincoln, NE 68588-0130, and **Mark W. Rogers**. *Gorenstein rings, parameter ideals, and limit closure.*

It is well-known that a commutative Noetherian local ring is Gorenstein if and only if it is Cohen-Macaulay and some system of parameters generates an irreducible ideal. Less well-known is a result of Northcott and Rees which states that if every system of parameters generates an irreducible ideal then the ring is Cohen-Macaulay (and hence Gorenstein). In this talk, we outline the proof of the following theorem:

Theorem: *A local ring is Gorenstein if and only if every power of the maximal ideal contains a system of parameters generating an irreducible ideal.* (Received August 11, 2006)