Title: The Linear Topology on a Noetherian Local domain \((R, m)\).

Examples of the \(m\)-adic completion and the ideal topology

Simplice Tchamma Kouna
Graduate Student, NMSU, Math Department
Advisor: Dr Bruce Olberding.

Abstract

We present the notion of linear topology on a Noetherian local domain and give some properties.
In the second part, we insist on the special case of linear topology called \(m\)-adic topology.
We give some properties of the \(m\)-adic topology and talk about the motivation of our research.
Finally we present the ideal topology, our results and open questions that we still working on.