Quintasymptotic sequences over an ideal and quintasymptotic cograde

Reza Naghipour

Department of Mathematics,
University of Tabriz, Tabriz, Iran
and
School of Mathematics, Institute for Research in Fundamental Sciences (IPM)
naghipour@ipm.ir and naghipour@tabrizu.ac.ir

Abstract

Let I denote an ideal of a Noetherian ring R. The purpose of this talk is to introduce the concepts of quintasymptotic sequences over I and quintasymptotic cograde of I, and it is shown that they play a role analogous to quintessential sequences over I and quintessential cograde of I. Also, we show that, if R is local, then the quintasymptotic cograde of I is unambiguously defined and behaves well when passing to certain related local rings. Finally, we use this cograde to characterize two classes of local rings.