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A presentation of the powers of the fundamental ideal and if the Milnor-Witt K-groups of a local ring

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Abstract

Panik-Pimenov-Scully showed that a quadratic space over a regular local ring R, containing a field of characteristic not 2, which becomes isotropic over the fraction field, is already so over R. In my talk I will explain how this result can be used to extend well known facts about quadratic forms over a field to local rings containing an infinite field of characteristic not two. This applies in particular to Elman's presentation of the powers of the fundamental ideal and to a presentation of the Milnor-Witt K-groups due to Hopkins-Morel.

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