

Ring epimorphisms, universal localisations and tilting modules

Ring epimorphisms are relevant to study certain subcategories of a fixed module category or of its derived category. Important examples of ring epimorphisms can be constructed via universal localisation, as defined by Cohn and Schofield. In the first part of the talk, we work with general rings and provide sufficient conditions for a ring epimorphism to be a universal localisation. Later on, the setting will be restricted to finite dimensional algebras. There, in some cases, a complete classification of the universal localisations will be presented. This classification can be used, for example, to establish a correspondence between universal localisations and certain generalised tilting modules.