LOCALLY COALGEBRA GALOIS EXTENSIONS

Bartosz Zielinski

University of Wales, Swansea

Locally coalgebra Galois extensions are defined as glueings of algebras such that each quantum subspace is a coalgebra Galois extension. We discuss some necessary and sufficient conditions for locally coalgebra Galois extension to be a coalgebra Galois extensions. An example is given involving glueing two quantum full tori (cleft U(1) extensions) to obtain coordinate algebra of lens spaces.