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**KENNY DE COMMER**, Vrije Universiteit Brussel

*Doi-Koppinen modules and quantized Harish-Chandra modules*

A (left) Doi-Koppinen datum consists of a bialgebra  $H$  together with a right  $H$ -comodule algebra  $A$  and a left  $H$ -module coalgebra  $C$ . A Doi-Koppinen module is then a left  $A$ -module which is at the same time a right  $C$ -comodule, such that the module and comodule structure are compatible in a natural way. Natural Doi-Koppinen data can be constructed from right coideal subalgebras in bialgebras. In this talk, we will revisit the theory of Doi-Koppinen modules for particular coideal subalgebras obtained from Letzter's quantum symmetric pairs, and will show that the associated Doi-Koppinen modules provide a natural framework for the quantization of Harish-Chandra modules associated to real semisimple Lie groups. If we have time, we will explain how in this setting, the Doi-Koppinen modules acquire a natural monoidal structure, based on a theorem due to Takeuchi. This is joint work with J.R. Dzokou Talla.