



Series of conferences on **Advances in Representation Theory of Algebras (ARTA)**  
Guanajuato-Toruń-Montréal  
Guanajuato, Mexico. June 22-26, 2015.

**NAME:** Zygmunt Pogorzały

**INSTITUTION AFILIATION:** Nicolaus Copernicus University, Toruń

**TITLE:** Bimodules determining stable equivalences for self-injective algebras

**ABSTRACT:** For a fixed algebraically closed field  $K$  we are interested in finite-dimensional  $K$ -algebras that are self-injective.

For two  $K$ -algebras  $A$ ,  $B$  we can consider the tensor product algebra  $A \otimes_K B^{\text{op}}$ . A left  $A \otimes_K B^{\text{op}}$ -module  $N$  determines a stable equivalence between  $A$  and  $B$  if the functor  $-\otimes_A N: \text{mod}(A) \rightarrow \text{mod}(B)$  induces an equivalence  $\underline{\text{mod}}(A) \rightarrow \underline{\text{mod}}(B)$ .

The aim of my talk is a description of the possible Auslander-Reiten components  $\Gamma(N)$  of  $\Gamma_{A \otimes_K B^{\text{op}}}$  that contain modules  $N$  determining stable equivalence between self-injective  $K$ -algebras  $A$  and  $B$ .

CIMAT