



Series of conferences on **Advances in Representation Theory of Algebras (ARTA)**  
Guanajuato-Toruñ-Montréal  
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**REGISTRATION FORM**

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**DATE OF ARRIVAL:** Still I do not know.

**DATE OF DEPARTURE:** Still I do not know.

**I WOULD LIKE TO PRESENT A TALK AT THE CONFERENCE:** yes

**PROPOSED TITLE AND ABSTRACT (AT MOST 20 LINES ARIAL 12 PT).**

**TITLE:** On the composition of irreducible morphisms

**ABSTRACT:**

We consider  $A$  to be an artin algebra. By  $\text{mod}A$  we mean the category of finitely generated left  $A$ -modules.

One of the aims of the Representation theory of artin algebras is to study the compositions of irreducible morphisms and their relationship with the powers of the radical of their module category.

As we know, the composition of  $n$  irreducible morphisms between indecomposable modules could be a non-zero map in the  $(n+1)$ -th power of the radical of its module category. In [CPT], for a finite dimensional algebra over an algebraically closed field, the authors studied the composition of irreducible morphisms between modules in regular components of the Auslander-Reiten quiver.

In this work, we generalize to the context of artin algebras the results proven in [CPT]. We also obtain some useful consequences.

**REFERENCES:**

[CPT] C. Chaio, M. I. Platzeck, S. Trepode, The composite of irreducible morphisms in regular components, *Colloquium Math.* 123, (2011), (1), 27 - 47.

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