

CoE-MaSS weekly seminar series

THE DST-NRF CENTRE OF EXCELLENCE IN MATHEMATICAL AND
STATISTICAL SCIENCES (CoE-MaSS) WOULD LIKE TO PRESENT
A SEMINAR BY

Dr J Sanchez-Ortega

*(Department of Mathematics and Applied Mathematics, University
of Cape Town, South Africa)*

“On the study of σ -Biderivations of Triangular Algebras”

Friday, 7 April 2017
10h30-11h30



Broadcast live from:
Videoconferencing Facility, 1st Floor
Mathematical Sciences Building, Wits West Campus

How to connect to this seminar remotely:

You can connect remotely via Vidyo to this research seminar by clicking on this link:
<http://wits-vc.tenet.ac.za/flex.html?roomdirect.html&key=y0SSOwFsvsidbzig4qFdWXvvQtyl>
and downloading the Vidyo software before the seminar.

You must please join in the virtual venue (called “*CoE Seminar Room (Wits)*” on Vidyo)
strictly between **10h00-10h15**. No latecomers will be added.

Important videoconferencing netiquette:

Once the seminar commences, please mute your own microphone so that there is no feedback from your side into the virtual room. During the Q&A slot you can then unmute your microphone if you have a question to ask the speaker.

Title:

On the study of σ -Biderivations of Triangular Algebras

Presenter:

Dr J Sanchez-Ortega, Department of Mathematics and Applied Mathematics, University of Cape Town, South Africa, juana.sanchez-ortega@uct.ac.za

Abstract:

Triangular algebras were introduced by Chase [Cha] in the early 1960s. He ended up with these structures in the course of his study of the asymmetric behavior of semi-hereditary rings. He used them to provide an example of a left semi-hereditary ring which is not right semi-hereditary. Since their introduction, triangular algebras have played an important role in the development of ring theory. In the middle/late 1990s, several authors undertook the study of derivations and related maps over some families of triangular algebras; see [Chr, CM, FM, Jn] and references therein. See [Ch1] for linear maps of abstract triangular algebras.

Here, we will focus our attention on σ -biderivations of triangular algebras (σ is an automorphism of the algebra). We will introduce and describe a new class of automorphisms of triangular algebras, and provide many classes of triangular algebras whose automorphisms can be determined.