

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

Prof Patrice Ntumba

*(Department of Mathematics and Applied Mathematics, University
of Pretoria)*

“Clifford algebras of O_X -quadratic spaces”

Wednesday, 01 June 2016
09h30-10h30



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=y0SSOwFsvsidbzg4qFdWXvvQtyl>
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:

Clifford algebras of \mathcal{O}_X -quadratic spaces

Presenter:

Prof Patrice Ntumba, Department of Mathematics and Applied Mathematics,
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Abstract:

In the classical theory of quadratic forms and Clifford algebras, it is a well known result that, given a finitely generated projective module P , if $H[P]$ denotes the associated hyperbolic space of P , then the (graded) algebras $\text{Cl}(H[P])$ and $\text{End}(\wedge(P))$ are isomorphic. We investigate the conditions under which a counterpart of this result holds in the sheaf-theoretic context. Next, we introduce standard involutions for \mathcal{O}_X -algebras associated with K -algebras, where K is a unital commutative ring with no zero divisors for the purpose of defining graded quadratic extensions of the ringed space $(X; \mathcal{O}_X)$, where $X = \text{Spec}(K)$.