

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 Charles Swartz
(*New Mexico State University*)

"The Orlicz-Pettis Theorem for Multiplier Convergent Series"

Friday, 26 May 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:

The Orlicz-Pettis Theorem for Multiplier Convergent Series

Presenter:

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Abstract:

An Orlicz-Pettis Theorem is a result which asserts that a series in a topological vector space which converges in a weak topology converges in a stronger topology. The original Orlicz-Pettis Theorem asserts that a series in a normed space which is subseries convergent in the weak topology is subseries convergent in the norm topology. We consider versions of the Orlicz-Pettis Theorem for multiplier convergent series.. If λ is a scalar sequence spaces and Z is a topological vector space a series $\sum_{j} z_{j}$ in Z is λ multiplier convergent if the series $\sum_{j=1}^{\infty} t_{j} z_{j}$ converges in Z for every $t = \{t_{j}\} \in \lambda$. For example, if $\lambda = m_0$, the space of sequences with finite range, a series is m_0 multiplier convergent iff the series is subseries convergent. We consider conditions on the multiplier space λ which guarantee that a series which is λ multiplier convergent in the weak topology of a locally convex space is λ multiplier convergent in some stronger topology such as the Mackey topology.