VCU MATHEMATICS DEPARTMENT COLLOQUIUM ANNOUNCEMENT

Friday, November 21st, 2008 • 4:00 PM Oliver Hall Room 2084

Speaker: Prof. Joseph Diestel

Kent State University Department of Mathematics

Title:

Sums

Abstract: We learn in calculus about convergent infinite series and one of the basic results is that a series that's unconditionally convergent is absolutely convergent and conversely. We might also learn about what happens if a series is convergent bur not absolutely convergent; in this case, rather spectacular things happen as well.

After reviewing these results, we'll enter into a discussion of what happens in higher dimensions. What's the situation in Euclidean n-space? The still-wonderful theorem of Levi-Steinitz will be discussed and some open problems mentioned. If time permits, we will talk about what happens when we're dealing with infinite dimensional spaces.

Coffee, tea, and cookies available in Oliver Hall 2035 at 3:00 A dinner with the speaker will follow

Biographical Sketch: Joe Diestel is a professor of mathematics at Kent State University. He has authored five books and over 50 articles in the field of functional analysis and has advised more than 20 Ph.D. students.

Professor Diestel proved many major results relating to the geometry of infinite dimensional Banach spaces and is well known for his expository writing. His book *Vector Measures* (with Jerry Uhl) is an oft-cited and highly regarded exposition of the interplay between vector measure theory and Banach space theory. His most recent book (coauthored with Jan Fourie and Johan Swart) entitled *The Metric Theory of Tensor Products*, revisits the famous *Résumé* of Fields Medalist Alexander Grothendieck.