

Department of Mathematics and Statistics Colloquium

Simply Un-Real

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Abstract: Have you ever wondered who is responsible for the concepts you learn about in Math 237, and why? Ever wonder about the origin of vectors, or how vector algebra and vector calculus came on the mathematical scene? Could there currently be a revival of sorts, for precursor mathematical systems that have been forgotten or overlooked due more to unfortunate circumstance than anything else? Could such a system become the standard mathematics of the future for multiple dimensions? Can there be bigger systems out there that include and surpass our current vector algebra system, and that unify our familiar systems of reals with systems you may be somewhat familiar with (like complex numbers) and with systems that are likely lesser known to you (like quaternions), and beyond!? Is it possible to understand any of this assuming knowledge of only very basic concepts of linear algebra? Do you wonder how two “applied mathematicians” may have happened upon such ponderings? Do you like cookies? If you think the answer to any of the above questions might be “yes”, then this might be the talk for you! Exploring these and other mysteries of the (mathematical) universe provide the context for this two-part talk – *simply unreal!*

Monday, September 21 at 3:45 in Roop 103

refreshments at 3:30