Thursday, February 18th, 4:10 - 5:00 p.m.

In Surge 285 - MUCC

"Hamel functions"

Dr. Michael Hartglass, UC Riverside

In the definition for a linear transformation, $T$, one usually has:

1.) Addition property: $T(v + w) = T(v) + T(w)$ for all vectors $u$ and $v$

2.) Scalar multiplication property: $T(cv) = cT(v)$ for any scalar $c$ and any vector $v$.

In this talk, we will explore what happens when condition 2 is eliminated, and we will get the existence of some functions that can behave quite strangely. We will use these strange functions to solve some very simple-sounding geometric problems.

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