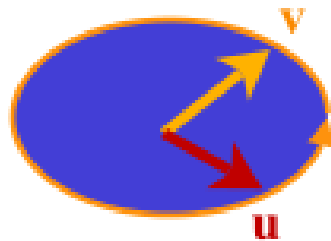
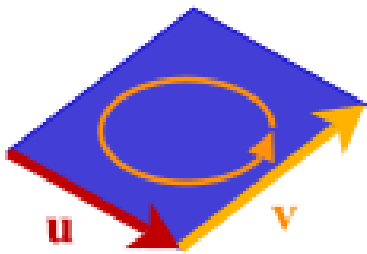


# Introduction to the geometric product and the geometric algebras $G^2$ and $G^3$

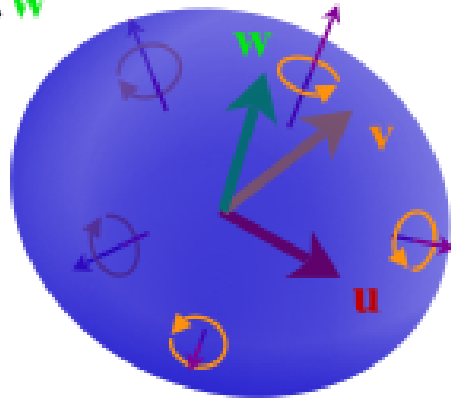
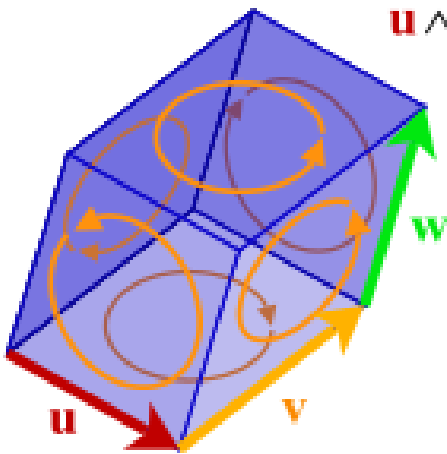
$\cdot +$   
Tim Lauck



$u \wedge v$



$u \wedge v \wedge w$



Building on the work of Grassmann and Clifford, modern day proponents have logged an impressive array of applications in physics, engineering and computer science. Some have even claimed that these systems should be a part of a new way we communicate science. While it was the potential of understanding the applications that initially drew me in, studying just the mathematical beginnings of this subject was inspiring enough for me to want to give a talk on it. I hope you'll follow along with my own baby steps, share the excitement, beauty, math connections and unification that these algebras provide.

Tim Lauck has been a lecturer in mathematics at HSU since 2002. He has a masters degree from Humboldt State University and did many years of further graduate work at the University of British Columbia studying under Colin Clark.

Thursday, May 2, 2019

BSS Room 166, 4:00 PM

To view this poster online, go to <http://www.humboldt.edu/math/news-and-events/math-colloquium>  
We cordially invite you to the Pre-Colloquium Tea on the third floor of the BSS building at 3:30 pm on Thursday.