

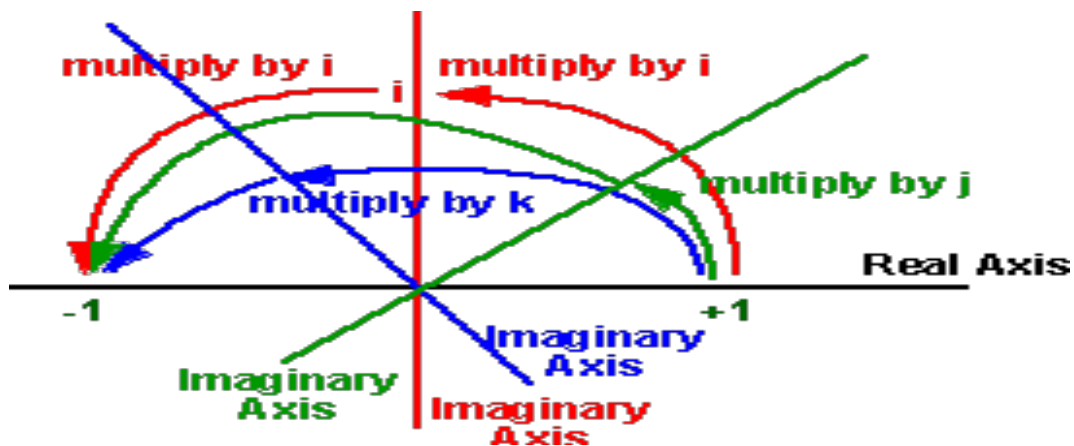
Undergraduate Math Seminar

Quaternion Algebra

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Abstract. The 19th century mathematician William Hamilton was fascinated by the role \mathbb{C} played in two dimensional geometry, he began the discovery of the quaternions as an attempt to create a three dimensional analog with two imaginary units, instead he discovered a 4-dimensional analog in which each number, x , can be represented as $a + bi + cj + dk$. The aim of this talk is to introduce some elementary properties of the quaternion algebra, \mathbb{H} , and show their relation to some of the classic matrix groups and the projective space $\mathbb{P}_{\mathbb{R}}^3$.



When: Monday, October 7, 2019 4:30-5:20 pm

Where: CSUCI, Sierra Hall 2411