**THOMAS A. IVEY**, College of Charleston

*Austere Submanifolds in Complex Projective Space*

A submanifold $M$ for in Euclidean space $\mathbb{R}^n$ is austere if all odd-degree symmetric polynomials in the eigenvalues of the second fundamental form (in any normal direction) vanish. Harvey and Lawson showed that this condition is necessary and sufficient for the normal bundle of $M$ to be special Lagrangian in $T\mathbb{R}^n \cong \mathbb{C}^n$. A similar result was proved by Karigiannis and Min-Oo for $S^n$ with $TS^n$ carrying a Calibi-Yau metric due to Stenzel.

In a preliminary report on joint work with Marianty Ionel, we investigate the conditions under which the normal bundle of a submanifold in $\mathbb{C}P^n$ is special Lagrangian with respect to the Stenzel metric on $T\mathbb{C}P^n$, including some examples and classification results.