

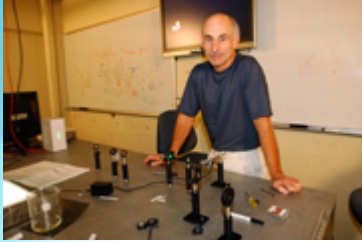
Physics Colloquium

Michigan Technological University

Thursday, September 12, 2013

at 4:00 pm

Room 139 Fisher Hall



Fire, Fractals and the Divine Proportion

Chris Sorensen

Physics

Kansas State University

Abstract: Soot, the by-product of combustion, that smoky, black stuff from chimneys and power plants and the inside of the tail pipe of my BMW Z3 roadster, what scientist would ever bother to study soot? As a “particle physicist”, that’s what I do, and I find that soot has mysteries and beauties that can entertain any curiosity. In this talk I will describe some 30 years of my researches into soot and other aggregate structures; an unlikely journey of discovery to find fractal structures with non-Euclidian dimensionality, networks that tenuously span space and common themes between spirals, sunflowers and soot.

Bio: Chris Sorensen is the Cortelyou-Rust University Distinguished Professor and a University Distinguished Teaching Scholar in the Departments of Physics and Chemistry (adjunct). He has won numerous teaching awards. In 2007 he was named the CASE/Carnegie Foundation United States Professor of the year for doctoral universities.

He is also an active scientist with over 270 publications and six patents. In 2003 he won the Sinclair Award of the American Association for Aerosol Research, and he is a past president of that organization. He is a Fellow of the AAAR and of the American Physical Society.

Sorensen graduated from the University of Nebraska in 1969 where he was Phi Beta Kappa and a Woodrow Wilson Fellow. He was drafted and served in Vietnam. He earned his PhD from the University of Colorado in 1977. In 2008 he was named a Norlin Distinguished Graduate of that university.