**MESA (Mechatronics, Embedded Systems and Automation) Lab Presents**

**A Research Seminar at The Applied Fractional Calculus (AFC) Workshop Series**

**Date/Time/Place:** 05/19/2014, 4-6PM, MESA Lab (Room 820), 4225 N. Hospital Rd., Atwater, CA 95301. T: 209-2284398

**Title:** Optimization Strategies for Building Energy Management Systems

**Abstract:** We analyze the control complexity for Heating, Ventilation, and Air-Conditioning equipment units by a building automation demo system, introduce physical dynamic models about Air Handling Unit, degrees of freedom and constraints on the basis of model predictive control technology.

**Speaker Name / Contact:** Xiaobao Jia Chen, xjia3@ucmerced.edu

**Speaker’s short biography:**

Xiaobao Jia received his bachelor degree from Beijing University of Chemical Technology in 1999, master degree from Xidian University China in 2006, and his major is automatical control. His research interests focused on both the control theory and building energy-saving technology.

**Key references:**

2. Eduardo F. Camacho, Carlos Bordons. Model Predictive Control(second edition)