

SPRING 2008 SEMINAR SERIES

Date: Thursday, February 7, 2008

Time: 11:00 am – 12:00 pm

Room: SL 165

Everyone is invited

What Drives Engine Efficiency?

**Patrick Pierz, Director of Advanced Systems Design, Cummins, Inc.,
Columbus, IN**

Abstract.

With fuel prices soaring, and concerns about global warming, engine efficiency is front and center. This talk will define the three areas that impact the conversion of chemical energy into shaft work in a reciprocating internal-combustion engine. It will also help us to understand why magnets on the fuel inlet will not cause efficiency to improve.

About the Speaker.

Patrick Pierz joined Cummins, Inc. following his graduation from the University of Illinois in 1982. Patrick has had various roles since that time, including: current product development, spending two years in England working at an engine manufacturing and assembly plant, advanced engine development, combustion research, including an intensive study on HCCI (Homogeneous Charge Compression Ignition), and he led the effort to define the after treatment technology used on Cummins diesel engines in North America and Europe. Patrick's current role is Director of Advanced Systems Design, which includes defining what Cummins' engines will look like in 2013 and beyond. Patrick holds eight patents and is a registered Professional Engineer.