

HIGH-SPEED IMAGING METHODS FOR RESEARCH AND EXPERIMENTATION

September 18th- 21th, 2017 | Golden, CO | Colorado School of Mines

About this course...

A hands-on, world class short course from Colorado School of Mines and AXPRO Explosive Research Laboratory (ERL).

Vision Research, a world leader in digital high speed imaging, is sponsoring this course. Focus is on experimentation techniques with explosives and ballistics. **Mr. Frank Mazella**, Learning Products Manager at Vision Research, will be instructing.

Students will be working one-on-one with instructors on specific technical problems of high-speed imagery and camera setups.

Registration Information

For registration please visit our website :<http://www.csm.space.com/events/hispeeding/> For questions about registration, please contact Office of Special Programs and Continuing Education: (303) 279-5563 or space@mines.

For technical course questions please contact **Dr. Vilem Petr** (303)273-3232 or email: vpetr@mines.edu.

Please visit our website AXPRO.MINES.EDU

Course Content

A wide range of material will be covered including: detonation and shock wave physics, an introduction to high-speed imaging, lighting and selecting lenses for the best results, triggering strategies, analysis of high-speed imagery, and more.



Registration

The registration type(s) and fee(s) for High-Speed Imaging Methods for Research and Experimentation are shown below:

- Regular Attendees — \$ 2,495 (USD)
- Regular Attendees - On Site — \$ 2,695 (USD)

Day One -Tuesday 09/27/2016

Introduction to High-speed Imaging
Laboratory Safety
Lenses and Optics in High Speed Video
Illumination and Light Consideration
Triggering

Welcome Reception 5:30 PM Hill Hall 300

Day Two -Wednesday 09/28/2016

Introduction to Phantom camera Control
Classroom Hands -on exercises
Introduction to High-Speed Motion
Analyses Software
Data analyses

Day Three -Thursday 09/29/2016

Practical Training at our Explosive Research Laboratory (ERL) at Idaho Springs
Practical Exercise: Group test results analyses

Personal Protective equipment (PPE) is Required on Day 3

Day Four -Friday 09/30/2016

Practical Exercise: Group test results analyses using motion analysis Software
Group presentation
Wrap-Up(Q&A, Evaluations)
Certificates