





5th ISEA WINTER SCHOOL IN SPORTS ENGINEERING "SAFETY ISSUES IN WINTER SPORTS"

March 4th - 9th, 2015 San Vito di Cadore – Cortina d'Ampezzo (Italy)

http://www.dii.unipd.it/corsi/summer-and-winter-schools/winter-school-sports-engineering http://www.tu-chemnitz.de/mb/sgt/winterschool/index.php

http://www.sportsengineering.co.uk/school.php ISEA Winter School in Sports Engineering

The School will focus on Safety Issues in **Winter Sports**, providing students with the opportunity to enhance their knowledge and expertise on ski, snowboard, cross country ski and other Winter Sports safety, especially in relation to the effect on safety of different devices, design solutions and protective equipments, with the opportunity of conducting a pilot research project.

Theoretical lectures read by expert Professors active in the field of Sports Engineering will be complemented by technical sessions with a "hands-on" approach to the application of sensors and the use of systems applied to the safety of sport equipments on winter sports resorts and terrains. During the field test sessions on the slopes, equipments and data collection systems will be used in the unique environment of Cortina d'Ampezzo's valley.

Prof. Veit Senner

Prof. Mont Hubbard

Prof. Uwe Kersting

Prof. Stephan Odenwald

ORGANIZING COMMITTEE:

Prof. Nicola Petrone (Host)

Department of Industrial Engineering

University of Padova (Italy)

Tel.: +39 049 8276761 Fax: +39 049 8276785

E-mail: nicola.petrone@unipd.it

COURSE LOCATION: "Centre of Studies of Alpine Environment", University of Padova, San Vito di Cadore,

Italy (www.tesaf.unipd.it/sanvito/index.asp)

PRELIMINARY PROGRAMME:

Lectures: Instrumentations for Field Data Collection, Winter Sport Injuries, Field Motion Capture Techniques, Modeling for Safety.. Techniques: Experimental Methods (Ski-Snowboard Load Cells, Pressure Insoles, EMG, IMU sensors, GPS).

Field Data Analysis: Upload of Field Data and Preliminary Analysis: teachers will assist in the re-analysis of the data collected on the field.

TEST SESSIONS: Time spent on the slopes, divided into groups. Field data collection and equipment comparative evaluation. (Ski-snowboard load cells, Pressure Insoles, EMG, IMU sensors...) (Ski - Boot - Snowboards and tracks comparative evaluation...)

The course fee, covering skipass and 5 nights' accommodation from March 4th to 9th at Hotel Dolomiti (http://www.hoteldolomiti.com), breakfast and dinner included) is 300 € for ISEA Master students and 350 € for ISEA PhD students (non ISEA members shall add 25 € to cover ISEA student membership); 500 € for Professionals or Company representatives.

Registration (by Jan 16th 2015): nicola.petrone@unipd.it, ludovica.lembo@unipd.it

Payment details: ludovica.lembo@unipd.it

General info: nicola.petrone@unipd.it





Dr. Martino Colonna

Prof. Andrei Koptioug

Prof. James McNeil

Prof. Matej Supej

IN COMBINATION WITH THE 21ST CONGRESS OF

INTERNATIONAL SOCIETY for SKIING

SAFETY

Cortina - San Vito, Dolomites ITALY, MARCH 8th - 13th 2015























