



FREIE UNIVERSITÄT BOZEN
LIBERA UNIVERSITÀ DI BOLZANO
FREE UNIVERSITY OF BOZEN · BOLZANO

Fakultät für Naturwissenschaften
und Technik

Facoltà di Scienze
e Tecnologie

Faculty of Science
and Technology



Provincia Autonoma di Bolzano
Ripartizione Opere Idrauliche

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Please contact the organizers for further general information on the workshop.

A second announcement with details about the registration procedure will be circulated in spring 2012.

Under the aegis of:



Italian Society of
Agricultural Engineering



International Association of
Engineering Geology
Italian National Group

Quantification of sediment transfer in mountain streams – both as bedload transport and as debris flows – has experienced significant advances over the last two decades. However, the relevance of these processes for hazard assessment, for design of control structures and for the comprehension of morphological and ecological dynamics of river systems urges further refinements in monitoring techniques. Actually, field observations in mountain channels are subjected to severe technical challenges, and these have hitherto hindered the development of a widespread network of monitoring sites.

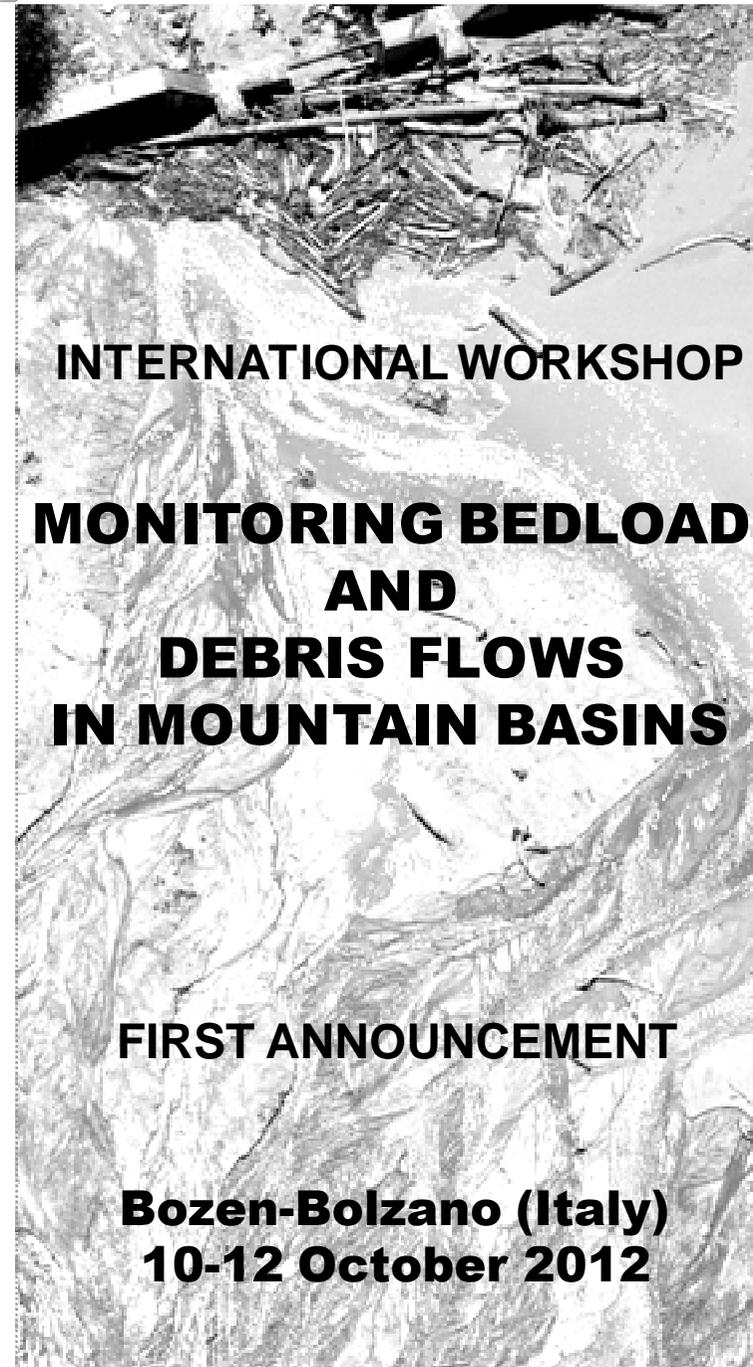
This international workshop intends to bring together scientists actively studying bedload and debris-flow monitoring in mountain environments, as well as technicians, professionals and public agencies interested in learning the state-of-the-art on the topic and discussing further developments. The main objectives of the workshop can be summarized as follows:

- Disseminate the state-of-the-art on sediment transport dynamics and its monitoring in mountain basins
- Share research experiences and achievements in bedload and debris-flow monitoring
- Highlight pros and cons of different methods and instruments deployed (including maintenance and cost issues)
- Identify the needs and directions for further technological development

The workshop (entirely in English) will consist of two sessions, one for bedload transport and one for debris flows. Each session includes seven invited talks (30 min plus 15 min of discussion), one poster session during the afternoon and a concluding round table. A field trip is offered on the third day visiting a recently completed debris-flow monitoring station near Bolzano .

Scientific committee:

- Massimo Arattano (CNR IRPI Torino, Italy)
- Francesco Comiti (Free University of Bozen-Bolzano, Italy)
- Christoph Graf (WSL Birmensdorf, Switzerland)
- Jonathan Laronne (Ben Gurion University of the Negev, Israel)
- Lorenzo Marchi (CNR IRPI Padova, Italy)
- Christian Scheidl (BOKU University Wien, Austria)



INTERNATIONAL WORKSHOP

**MONITORING BEDLOAD
AND
DEBRIS FLOWS
IN MOUNTAIN BASINS**

FIRST ANNOUNCEMENT

**Bozen-Bolzano (Italy)
10-12 October 2012**

PROGRAMME

October 10

8:30 – 9:00 Registration

9:00 Welcome (Free University of Bozen-Bolzano and Autonomous Province of Bozen-Bolzano)

9:15 Introduction to the workshop (F. Comiti)

Session I - Bedload monitoring (Chairman: F. Comiti)

J. Laronne (09:30 – 10:15): Novel surrogate techniques for bedload monitoring: the calibration issue

K. Bunte (10:15 – 11:00): Why bedload traps? Range of employment conditions and what we learned from results

Coffee break (11:00 – 11:30)

T. Mizuyama (11:30 – 12:15): Bedload monitoring in Japan

D. Rickenmann (12:15 – 13:00): Bedload monitoring in Switzerland

Lunch (13:00 – 14:30)

H. Habersack (14:30 – 15:15): Bedload monitoring in Austria

F. Liebault (15:15 – 16:00): Bedload transport monitoring at Draix (Southern French Prealps)

L. Mao (16:00 – 16:45): Bedload monitoring in Italy

Coffee break and POSTER SESSION I (16:45 – 17:45)

Round table on future developments for bedload monitoring (17:45 – 18:45) (Moderator: J. Laronne)

Social dinner (not included in the registration fee)

October 11

Session II – Debris-flow monitoring and warning (Chairman: C. Graf)

B. McArdell (09:00 – 9:45): Debris-flow monitoring in Switzerland

M. Hürlimann (09:45 – 10:30): Debris-flow monitoring in the Catalan Pyrenees. Lessons learnt applying wired and wireless sensor networks

Coffee break (10:30 – 11:00)

J. Hübl (11:00 – 11:45): Debris-flow monitoring in Austria

L. Marchi (11:45 – 12:30): Debris-flow monitoring in Italy

J. Coe (12:30 – 13:15): Monitoring the sediment cascade at Chalk Cliffs, Colorado, USA: from headwater rockfall to debris-fan aggradation

Lunch (13:15 – 14:45)

H. Suwa (14:45 – 15:30): Debris-flow monitoring in Japan

H.Y. Yin (15:30 – 16:15): Debris-flow monitoring and warning in Taiwan

Coffee break and POSTER SESSION II (16:15 – 17:15)

Round table on future developments for debris-flow monitoring (17:15 – 18:15) (Moderator: M. Arattano)

October 12

Field trip (led by P. Macconi) to the debris-flow monitoring station of the Gadria basin (upper Venosta/Vinschgau valley, about 1 hour drive from Bolzano) with on-site discussion on technical issues regarding debris-flow and bedload monitoring (moderation by C. Scheidl)

POSTER PRESENTATION

For poster presentation, an abstract (see below) should be sent before June 1st 2012 to:

- Jonathan Laronne (john@exchange.bgu.ac.it) for bedload related posters
- Christian Scheidl (christian.scheidl@boku.ac.at) for posters on debris flows

The scientific committee will select posters based on their suitability for the workshop.

Abstract format

I. M. Author¹ and C. O. Author²

¹Hard Knocks Laboratory, Department of Civil and Environmental Engineering, Research State University, City, Country; email:

²Everlasting Company, City, Country; email: PH

Keywords (up to 4)

The abstract should present a concise statement of the scope, principal findings, and conclusions of the research. Your abstract should have at most 250 words, containing no artworks.

REGISTRATION

The cost of registration is 90€ and includes coffeebreaks, buffets and transportation for the field trip.

Registration deadline is July 20th, 2012. Instructions for registering will be given with the second announcement.

The maximum number of participants is 130 to keep the size of the room ideal for a workshop with active discussion.

TRAVEL AND LODGING

Information on how to reach Bozen-Bolzano can be found at:

www.unibz.it/en/sciencetechnology/welcome/reachus/default.html

A list of hotels with rooms at reduced price will be made available for the registered participants.