

McCray Symposium 2015: a celebration of supernovae, superbubbles, gamma-ray bursts and other cosmic explosions

University of Bern, Switzerland
1st to 5th June 2015 (Monday to Friday)
Exact Sciences building, Sidlerstrasse 5 (Hall #099)

All Swiss-based researchers are welcome
Welcome address by Prof. Willy Benz
Public talk by Prof. Alicia Soderberg

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**UNIVERSITÄT
BERN**

CSH
CENTER FOR SPACE AND
HABITABILITY

Invited Speakers:

Miguel de Avillez (Evora)
Kazik Borkowski (NC State)
Adam Burrows (Princeton)
David Burrows (Penn State)
Poonam Chandra (TIFR)
Roger Chevalier (Virginia)
You-Hua Chu (ASIAA)
Eli Dwek (NASA-GSFC)
Claes Fransson (Stockholm)
Remy Indebetouw (Virginia)
Tim Kallman (NASA-GSFC)
Julia Kamenetzky (Arizona)
Bruno Leibundgut (ESO)
Peter Lundqvist (Stockholm)
Jonathan Mackey (Cologne)
Mordecai Mac Low (AMNH)
Mikako Matsuura (Cardiff)
Richard McCray (Berkeley/Colorado)
Maryam Modjaz (NYU)
Katia Migotto (Stockholm)
Ken Nomoto (Tokyo)
Alak Ray (TIFR)
John Raymond (Harvard)
Kevin Schawinski (ETH Zurich)
Nathan Smith (Arizona)
Alicia Soderberg (Harvard)
Jason Spyromilio (ESO)
Friedrich Thielemann (Basel)
James Wadsley (McMaster)
Daniel Wang (U Mass)

*contact: Kevin Heng (kevin.heng@csh.unibe.ch)
SOC: Chevalier, Fransson, Heng, Kirshner, Mac Low*

Richard **McCray**: Good Times on the Way to Bern

Claes **Fransson**: The Ejecta of SN 1987A at Late Epochs

Alicia **Soderberg**: Supernova Forensics

Maryam **Modjaz**: Progenitor Diagnostics for Stripped SNe and SN-GRBs

Jason **Spyromilio**: First 700 Days of SN 1987A

David **Burrows**: Chandra Observations of SN 1987A

Miguel **de Avillez**: Joint Thermal and Dynamical Evolution of Superbubbles in the Galaxy

Peter **Lundqvist**: Constraining the Origin of Type Ia SNe

Roger **Chevalier**: Jet or Shock Breakout: the Case of GRB 060218

Nathan **Smith**: Asymmetric Mass Loss and Circumstellar Material around Massive Stars

Mikako **Matsuura**: Dust and Molecules in Supernova 1987A - 25 Years After the Explosion

Eli **Dwek**: The Evolution of Dust in the Ejecta and Ring of SN 1987A

John **Raymond**: Proton, Electron and Ion Temperatures in SNR Shocks

Kazik **Borkowski**: Young Supernova Remnants and their Supernovae

Julia **Kamenetzky**: CO and SiO in SN 1987A Revealed by ALMA

Remy **Indebetouw**: ALMA Investigates SN 1987A, Part 3: Non-thermal Emission and Future Prospects

James **Wadsley**: Superbubbles in Simulations of Galaxy Evolution

Mordecai **Mac Low**: Superbubbles in their Galactic Context

You-Hua **Chu**: Bubbles

Jonathan **Mackey**: H II Regions, Wind Bubbles and Shells around Hot and Cool Stars

Daniel **Wang**: Feedback from Starbursts: 30 Dorado as a Case Study

Tim **Kallman**: Searching for Molecules in ISM X-ray Spectra

Bruno **Leibundgut**: Transients & ESO

Poonam **Chandra**: Extraordinary Evolution of Circumstellar Interaction in Supernova SN 2010jl

Alak **Ray**: Red and Dead Supergiants

Katia **Migotto**: Destruction of the Circumstellar Ring of SN 1987A

Friedrich **Thielemann**: Neutron Star Mergers vs. (MHD-)Supernovae

Adam **Burrows**: Progress in Unraveling the Core-Collapse Supernova Mechanism

Ken **Nomoto**: Progenitors of Type Ia Supernovae

Kevin **Schawinski**: New Insights into How the Galaxy-Black Hole Connection Works

Kevin **Heng**: Exoplanetary Atmospheres

Monday (1st June)	Tuesday (2nd June)	Wednesday (3rd June)	Thursday (4th June)	Friday (5th June)
Welcome reception (09:00-09:50)	Chevalier, Smith (09:00-10:30)	Wadsley, Mac Low (09:00-10:30)	Recreation & Conference Dinner Hike or train ride to the Gurten peak [meet at 10:00 at the entrance of Exact Sciences building facing Alps] Lunch on the Gurten peak & viewing the Alps [at own pace] View the bear pits and rose garden (next to dinner venue) [meet at 16:30 at entrance of dinner venue] Dinner at Altes Tramdepot [18:30 onwards] [www.altestramdepot.ch]	Thielemann, A. Burrows, Nomoto (10:30-12:45) [Room is used for an exam until 10:00] Note: coffee/tea served at 10:00!
Welcome address Benz (09:50-10:00)	Coffee/tea break (10:30-11:00)	Coffee/tea break (10:30-11:00)		
McCray, Fransson, Soderberg (10:00-12:15)	Matsuura, Dwek (11:00-12:30)	Chu, Mackey (11:00-12:30)		
Lunch break (12:15-14:00)	Lunch break (12:30-14:30)	Lunch break (12:30-14:30)		Lunch break (12:45-14:30)
Modjaz, Spyromilio (14:00-15:30)	Raymond, Borkowski (14:30-16:00)	Wang, Kallman (14:30-16:00)		Schawinski, Heng (14:30-16:00)
Coffee/tea break (15:30-16:00)	Coffee/tea break (16:00-16:30)	Coffee/tea break (16:00-16:30)		Coffee/tea break (16:00-17:00)
D. Burrows, de Avillez (16:00-17:30)	Kamenetzky, Indebetouw (16:30-18:00)	Leibundgut, Chandra, Ray, Migotto (20 min each + Q&A) (16:30-18:00)		Public talk by Alicia Soderberg (17:00-18:00)
Lundqvist (17:30-18:15)				Apero (public) (18:00-19:00)

Each talk is 35+10 minutes long (unless otherwise indicated)

Travel Advice

- Check if you need a visa for Switzerland. If you need a letter for your visa application, please contact Kevin Heng as soon as possible.
- Fly into Zurich international airport (**ZRH**).
- Take the train from ZRH to Bern. Use the www.sbb.ch website to help you plan. (Starting point: “Zurich Flughafen”; ending point: “Bern”.) Tickets may be purchased online or at the ticket counters or machines.
- For hotel accommodation, please send an email to Hotel Kreuz (info@kreuzbern.ch) and use the code “McCray-Symposium”. For more details, refer to previous email sent by Kevin Heng (dated 23rd Feb 2015).
- Physical address: University of Bern, Physics Institute, Sidlerstrasse 5, CH-3012, Bern, Switzerland. The building is called “Exakte Wissenschaften” (Exact Sciences).
- **Eduroam** works automatically on campus, so be sure to activate your eduroam wifi account before you depart for Switzerland.
- **Credit cards** in Switzerland require a **PIN number** to work. If you are coming from the United States, please work with your bank to obtain this PIN number beforehand. (It may take a week or more.)