Cancer is a complex disease involving several interconnected phenomena and events, which culminate in the uncontrolled growth of cells that can metastasize to other parts of the body. Understanding the many processes involved in the development of cancer is critical, and these processes are largely influenced by the interplay between genetic mutations and environmental factors. The workshop aims to explore the latest advancements in cancer research and provide a platform for collaborative discussion among experts.

**Workshop Overview**

- **Workshop Theme:** Cancer is a complex disease involving several interconnected phenomena and events, which culminate in the uncontrolled growth of cells that can metastasize to other parts of the body. Understanding the many processes involved in the development of cancer is critical, and these processes are largely influenced by the interplay between genetic mutations and environmental factors. The workshop aims to explore the latest advancements in cancer research and provide a platform for collaborative discussion among experts.

**Workshop Directors**

- **Waris Aminwardi**
  - DISS, Department of Informatics, Technology and Communication, University of Milano-Bicocca, Milano, Italy
- **Alice Giannella**
  - Institute of Molecular Biomechanics and Physiology, Italian National Research Council (CNR-IMM)
- **Mattia Mosca**
  - Researcher, Department of Mathematical Sciences, and Torino School of Engineering, North York, NY, USA

**Sponsors and Collaborators**

- **Waris Aminwardi**
  - DISS, Department of Informatics, Technology and Communication, University of Milano-Bicocca, Milano, Italy
- **Biocentro**
  - University of Milano-Bicocca, Milano, Italy
- **Charles University**
  - Prague, Czech Republic
- **Brno University of Technology**
  - Brno, Czech Republic

**Institutions**

- **DISS**
  - Department of Informatics, Technology and Communication, University of Milano-Bicocca, Milano, Italy
- **Translational Science Institute**
  - Medipolis, Cologno Monzese, Italy

**Local Organization**

- **Cinzia Mascherini**
  - DISS, University of Milano-Bicocca
- **Francesco Ingrosso**
  - University of Milano-Bicocca

**Web Site**

- [Laurana School](http://www.laurana.school.org)
- [CDAC 2019](http://www.cancerdevelopmentandcomplexity.org)

**Workshop Venue**

- **Venue:** Milano, Italy
- **Dates:** May 28 – May 31, 2019

**Workshop Focus**

The workshop focuses on the latest advancements in cancer research, with a particular emphasis on the role of mathematical modeling and computational methods in understanding cancer biology. The workshop will bring together experts from various disciplines, including biology, mathematics, and computer science, to discuss the latest findings and share insights on the future directions of cancer research.
Speakers

- Charles Cantor
  Agora Biosequencing, Sequenom, Retrotope and Boston University, USA
- Alessandra Carbone
  Laboratory of Computational and Quantitative Biology, Sorbonne Université, Paris, France
- Isabella Castiglioni
  Institute of Biomaging and Molecular Physiology of the National Research Council (IBFM-CNR), Milan, Italy
- Davide Cittaro
  Ospedale San Raffaele, Milan, Italy
- Sui Huang
  Institute for Systems Biology, Seattle, USA
- Enzo Medico
  IRCC Candiolo, Turin, Italy
- Bud Mishra
  Courant Institute of Mathematical Sciences and Tandon School of Engineering, NYU, USA
- Laxmi Parida
  IBM T.J. Watson Laboratory, Yorktown Heights, NY, USA
- Tamar Schlick
  Courant Institute of Mathematical Sciences and Dept. of Chemistry, New York University, New York, NY, USA
- Eduardo Sontag
  Electrical and Computer Engineering & Bioengineering, Northeastern University, USA
- Ioannis Tsamardinos
  Computer Science Department, University of Crete, Greece
Accommodation

Important! For all school speakers and attendees!

We have learned that third-party companies are contacting school speakers and attendees offering to make travel arrangements (hotel and flight bookings) on our behalf and asking for credit card details in order to proceed. PLEASE NOTE: these agencies are not authorized by us, this is most likely a fraud.

For any doubt do not hesitate to contact us. Thank you!
Registration

- Registration fees include participation to the school, social events, coffee breaks and school material.
- Registration: 350.00 € until April 30th, 2019
- Registration: 400.00 € afterward (*) and on site.
- Daily, on site registration: 100 € (social dinner extra)

(*) Participants affiliated with the four Universities supporting the Lake Como Schools (Milano Statale, Pavia, Milano Bicocca and Insubria) qualify for a 320.00 € registration fee.

All fees include VAT.

Registrations are closed.
Venue

Lake Como School of Advanced Studies, Villa del Grumello, Como, Italy.

Placed in a central position within Europe, close to four international airports, it is hosted in an outstanding old noble palace located on the shoreline of beautiful Lake Como. The School is an international research facility running short term programs on a wide range of interdisciplinary subjects, sharing a common focus on complex systems. The School attracts leading scholars in different fields including: physics, biology, economics, sociology, geopolitics, education, environmental and development studies, to engage in collaborative research. In small teams, visitors explore questions at the cutting edge of science and knowledge. In a context of globalization and in front of the increasing interaction between various kinds of networks, the analysis of complex systems offers insights into economic development, social cohesion and the environment on many geographical scales.

Venue: The school will be held at Villa del Grumello, Via per Cernobbio 11, Como (Italy).

HOW TO GET THERE: http://lakemocomschool.org/contact/travel-info/

Villa del Grumello is 20 min on foot from Como city center – you can also take a bus, lines 6 and 11 (bus stop: "Como Via Regina Piscine Villa Olmo", just after "Villa Olmo").

From the main Train Station (Como S. Giovanni), the nearest bus stop to catch line 6 and 11 is "Piazzale Rocchetta".
Monday 27th, Special Day Honoring Bud Mishra

Bud Mishra: An "Impure" Mathematician doing (Computer) Science, Biology, and Other Things

On Monday, May 27th, there will be an afternoon dedicated to Bud Mishra, in occasion of (one of) his birthday.

We will start with an aperitif lunch at 12:30 to continue with informal talks and presentations for the afternoon. Bud Mishra will hold a talk before we will reconverse for dinner at the Restaurant "L'Antica Riva" in Como.

The preliminary program is the following:

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30</td>
<td>Registration Aperitif and Lunch</td>
</tr>
<tr>
<td>13:30</td>
<td>Welcome by Marco Antoniotti</td>
</tr>
<tr>
<td>13:45</td>
<td>Juliano Laza</td>
</tr>
<tr>
<td>14:15</td>
<td>Charles Cantor</td>
</tr>
<tr>
<td>14:45</td>
<td>Carla Piazza</td>
</tr>
<tr>
<td>15:00</td>
<td>Pasquale Carannella</td>
</tr>
<tr>
<td>15:15</td>
<td>Alberto Policicci</td>
</tr>
<tr>
<td>15:30</td>
<td>Coffee break</td>
</tr>
<tr>
<td>16:00</td>
<td>Bud Mishra</td>
</tr>
<tr>
<td>19:30</td>
<td>Dinner (Como)</td>
</tr>
</tbody>
</table>

Note that Bud Mishra’s presentation, titled Logic in Time of Cancer will be held in the signature "SpamHaus" format.

Dinner will be at the Restaurant L’Antica Riva.

Join all the revelers in celebrating (one of) Bud’s Birthday!
Home

Cancer is a complex disease involving several interrelated phenomena and events, which collectively result in the tumor cells altering their physiology, metabolism, and immune response, leading to uncontrolled cell proliferation. Understanding these interactions at the cellular, molecular, and tissue levels is crucial for developing effective therapeutic approaches.

- Werner A. Arap
  - University of Pennsylvania, USA

- Albert Pasqualini
  - University of Pennsylvania, USA

- Ross L. Levine
  - University of Pennsylvania, USA

- Patrick J. Weng
  - University of Pennsylvania, USA

- Robert A. Weinberg
  - University of Massachusetts Medical School, USA

- George H. L. Fisher
  - University of California, USA

- William P.inkel
  - University of California, USA

- Nicholas Cowan
  - University of California, USA

- John A. Harper
  - University of California, USA

- Robert A. Weinberg
  - University of Massachusetts Medical School, USA

- Patrick J. Weng
  - University of Pennsylvania, USA

- Albert Pasqualini
  - University of Pennsylvania, USA

- Ross L. Levine
  - University of Pennsylvania, USA

- Werner A. Arap
  - University of Pennsylvania, USA
Speakers

- Charles Cantor
  Agena Biosciences, Sequenom, Retrotepe and Boston University, USA
- Alessandra Carbone
  Laboratory of Computational and Quantitative Biology, Sorbonne Université, Paris, France
- Isabella Castiglioni
  Institute of Biomaging and Molecular Physiology of the National Research Council (IBFM-CNR), Milan, Italy
- Davide Citterio
  Ospedale San Raffaele, Milan, Italy
- Sui Huang
  Institute for Systems Biology, Seattle, USA
- Enzo Medico
  IRCC Candiolo, Turin, Italy
- Bud Mishra
  Courant Institute of Mathematical Sciences and Tandon School of Engineering, NYU, USA
- Laxmi Parida
  IBM T.J. Watson Research, Yorktown Heights, NY, USA
- Tamar Schlick
  Courant Institute of Mathematical Sciences and Dept. of Chemistry, New York University, New York, NY, USA
- Eduardo Sontag
  Electrical and Computer Engineering & Bioengineering, Northeastern University, USA
- Ioannis Tzamardinos
  Computer Science Department, University of Crete, Greece
Accommodation

Important! For all school speakers and attendees!

We have learned that third party companies are contacting school speakers and attendees offering to make travel arrangements (hotel and flight bookings) on our behalf and asking for credit card details in order to proceed. PLEASE NOTE these agencies are not authorized by us, this is most likely a fraud.

For any doubt do not hesitate to contact us. Thank you!
Registration

- Registration fees include participation to the school, social events, coffee breaks and school material.
- Registration: 350.00 € until April 30th, 2019.
- Registration: 400.00 € afterward (*) and on site.
- Daily, on site registration: 100 € (social dinner extra)

(*) Participants affiliated with the four Universities supporting the Lake Como Schools (Milano Statale, Pavia, Milano Bicocca and Insubria) qualify for a 320.00 € registration fee.

All fees include VAT.

Registrations are closed.
Venue

Lake Como School of Advanced Studies, Villa del Grumello, Como, Italy.

Placed in a central position within Europe, close to four international airports, it is hosted in an outstanding old noble palace located on the shoreline of beautiful Lake Como. The School is an international research facility running short term programs on a wide range of interdisciplinary subjects, sharing a common focus on complex systems. The School attracts leading scholars in different fields including physics, biology, economics, sociology, geopolitics, education, environmental and development studies, to engage in collaborative research. In small teams, visitors explore questions at the cutting edge of science and knowledge. In a context of globalization and in front of the increasing interaction between various kinds of networks, the analysis of complex systems offers insights into economic development, social cohesion and the environment on many geographical scales.

Venue: The school will be held at Villa del Grumello, Via per Cernobbio 11, Como (Italy).

HOW TO GET THERE: http://lakecomoschool.org/contact/travel-info/

Villa del Grumello is 20 min on foot from Como city center – you can also take a bus, lines 6 and 11 (bus stop: “Como Via Regina Piscine Villa Olmo”, just after “Villa Olmo”).

From the main Train Station (Como S. Giovanni), the nearest bus stop to catch line 6 and 11 is “Piazzale Rocchetta”.

View larger map
Monday 27th, Special Day Honoring Bud Mishra

Bud Mishra: An “Impure” Mathematician doing (Computer) Science, Biology, and Other Things

On Monday, May 27th, there will be an afternoon dedicated to Bud Mishra, in occasion of (one of) his birthday.

We will start with an aperitif/lunch at 12:30 to continue with informal talks and presentations for the afternoon. Bud Mishra will hold a talk before we will reconverse for dinner at the Restaurant "L’Antica Riva" in Como.

The preliminary program is the following:

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30</td>
<td>Registration Aperitif and Lunch</td>
</tr>
<tr>
<td>13:30</td>
<td>Welcome by Marco Antonietti</td>
</tr>
<tr>
<td>13:45</td>
<td>Julian Laza</td>
</tr>
<tr>
<td>14:15</td>
<td>Charles Cantor</td>
</tr>
<tr>
<td>14:45</td>
<td>Carla Piazza</td>
</tr>
<tr>
<td>15:00</td>
<td>Pasquale Carosella</td>
</tr>
<tr>
<td>15:15</td>
<td>Alberto Policriti</td>
</tr>
<tr>
<td>15:30</td>
<td>Coffee break</td>
</tr>
<tr>
<td>16:00</td>
<td>Bud Mishra</td>
</tr>
<tr>
<td>19:30</td>
<td>Dinner (Como)</td>
</tr>
</tbody>
</table>

Note that Bud Mishra's presentation, titled Logic in Time of Cancer will be held in the signature "SpamHaus" format.

Dinner will be at the Restaurant L’Antica Riva.

Join all the revelers in celebrating (one of) Bud’s Birthday!