# Understanding Cancer via the Theoretical Sciences

## Thursday, 15 April 2010

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| 9:25 am | Opening Remarks by **Salvatore Torquato, Princeton U.** |
| 9:25 – 10:20 | "The Complexity of Cancer: Challenges and Opportunities"<br>**Anna D. Barker, Deputy Director, National Cancer Institute** |
| 10:20 – 10:40 | Discussion<br>**William Bialek, Princeton University** |
| 10:40 – 11:35 | "Toward an Ising Model for Cancer and Beyond"<br>**Salvatore Torquato, Princeton University** |
| 11:35 – 11:55 | Discussion<br>**Iain Couzin, Princeton University** |
| **12:00 – 1:30 pm** | **Lunch** |
| 1:30– 2:25 | "Evolution: Energy, Topology, and Cancer"<br>**Donald S. Coffey, Johns Hopkins University** |
| 2:25 – 2:45 | Discussion<br>**Lisa Manning, Princeton University** |
| 2:45 – 3:40 | "Population Genetics of Cancer"<br>**Gurinder S. Atwal, Cold Spring Harbor Laboratory** |
| 3:40 – 4:00 | Discussion<br>**Aleksandra Walczak, Princeton University** |
| **4:00 – 4:30** | **Coffee Break** |
| 4:30 – 5:25 | "Multiscale modeling of cancer: Cell lineages and feedback control"<br>**John Lowengrub, University of California, Irvine** |
| 5:25 – 5:45 | Discussion<br>**Chris Floudas, Princeton University** |

# Understanding Cancer via the Theoretical Sciences

## Friday, 16 April 2010

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|---|---|
| 9:00 – 12:00 | Panel Discussion<br><br>*Panelists*:<br>Robert Austin, Princeton University<br>Gurinder S. Atwal, Cold Spring Harbor Laboratory<br>Donald S. Coffey, Johns Hopkins U., School of Medicine<br>Yibin Kang, Princeton University<br>John Lowengrub, University California Davis<br>Salvatore Torquato, Princeton University |
| **12:00 pm** | **Lunch and adjournment.** |