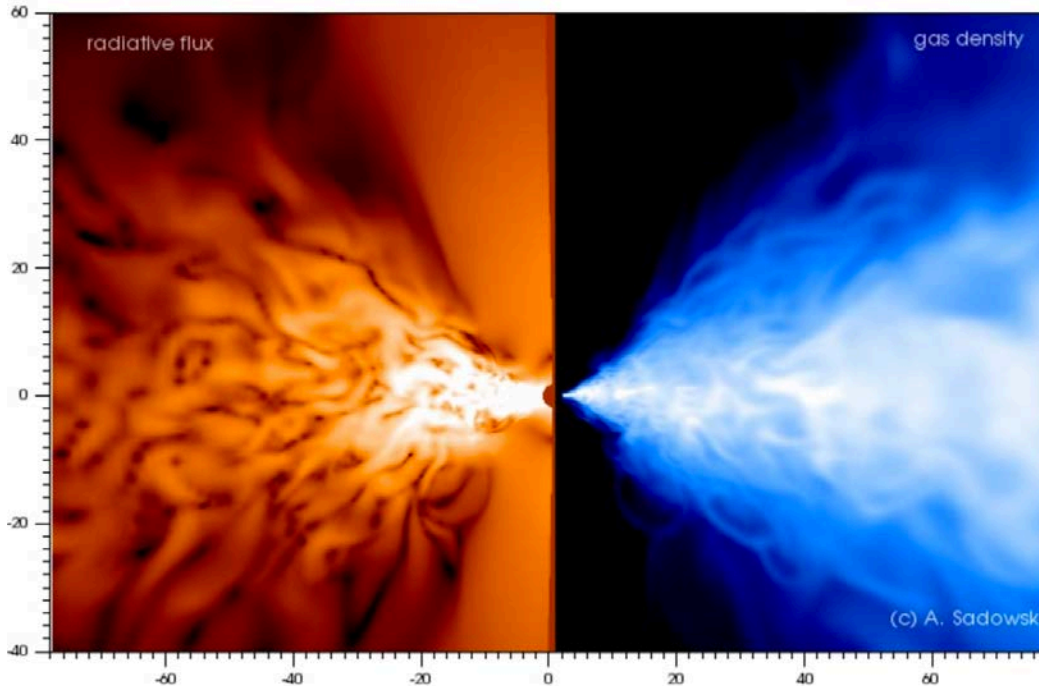




The Inaugural Black Hole Initiative Annual Conference



Scientific Program



First Annual BHI Conference on Black Holes

Monday, May 8 and Tuesday, May 9, 2017

Sheraton Commander Hotel, 16 Garden Street, Cambridge, MA

Hosted by the Black Hole Initiative, Harvard University
<http://bhi.fas.harvard.edu/>

All talks are 20 minutes (15+5)
Sessions held in the George Washington Ballroom
Coffee Breaks held in the adjacent Terrace Room

Monday, May 8, 9:00AM-5:30PM

9:00-9:10AM

Avi Loeb: Welcome

Session 1: LIGO

Session Chair: Ramesh Narayan

9:10-10:30AM

Scott Hughes: Black Hole Physics via Gravitational Waves

Dan Holz: LIGO's Black Holes

Samaya Nissanke: Follow the Roars and Chirps: The Astrophysics of LIGO's Binary Black Holes

Deirdre Shoemaker: Binary Black Holes

10:30-11:00AM

Coffee Break

Session 2: General Relativity

Session Chair: Ramesh Narayan

11:00-12:00PM

Clifford Will: Relativistic Evolution of Orbits Around Spinning Massive Black Holes

Emanuele Berti: Testing the Kerr Paradigm with Gravitational Wave Observations

Pankaj Joshi: Black Holes and Naked Singularities--The Story So Far

12:00-1:30PM

Lunch Break

Session 3: Physics

Session Chair: Andrew Strominger

1:30-3:00PM

Alejandra Castro Anich: Extreme Measures for Extremal Black Holes: Recent Theoretical Developments on Black Hole Entropy

Glen Barnich: BMS Current Algebra and Field Dependent Central Extension

Stefanos Aretakis: Tails of Linear Waves on Black Holes

Monica Guica: The Kerr/CFT Correspondence and String Theory

3:00-3:50PM

Coffee Break

Session 4: Supermassive Black Holes

Session Chair: Avi Loeb

3:50-5:30PM

Chung-Pei Ma: Supermassive Black Hole and Galaxy Coevolution?

Jeremiah Ostriker: Black Hole Accretion: The Generality of Inflow-Outflow Solutions

Marta Volonteri: The Feeding Cycle of Massive Black Holes

Scott Tremaine: The So-called Final Parsec Problem

Zoltan Haiman: Dirty Black Hole Mergers

6:30-10:00PM

Reception and Banquet Dinner in the Mount Vernon Ballroom

After dinner talk by **Clifford Will:** TBD

Session 5: Math/Philosophy

Session Chair: Shing-Tung Yau

9:00-10:30AM

David Kaiser: Coordinated Blasts: From H-Bomb Simulations to Numerical Relativity

Lars Andersson: New Conservation Laws for Fields on the Kerr Spacetime

Lydia Bieri: Gravitational Wave Memory in Cosmological Spacetime

Sean Gryb: Resolving the Cosmological Singularity Using Dynamical Quantum Geometry

10:30-11:00AM **Coffee Break**

Session 6: Astronomy

Session Chair: Sheperd Doeleman

11:00AM-12:30PM

Janna Levin: Black Hole Pulsar

Volker Bromm: Black Holes in the High-Redshift Universe

Priyamvada Natarajan: TBD

Edo Berger: TBD

12:30-2:00PM **Lunch Break**

Session 7: EHT

Session Chair: Ramesh Narayan

2:00-3:30PM

Sheperd Doeleman: TBD

Charles Gammie: Plasma Toupees

Avery Broderick: TBD

Michael Johnson: TBD

3:30-4:00PM **Coffee Break**

Session 8: Philosophy

Session Chair: Peter Galison

4:00-5:30PM

Lydia Patton: Listening to the Chirps: Estimating Black Hole Parameters Using the LIGO Results

Erik Curiel: Classical Black Holes Are Hot

David Wallace: Questions for Black Hole Evaporation from Quantum Statistical Mechanics

Jeroen van Dongen: History and Philosophy of the Black Hole Information Paradox

5:30PM **End of Conference**