

## Program for UCSC Institute for the Philosophy of Cosmology

Videos and Slides of the lectures will be posted on this page immediately after they have occurred.

### Week 1: June 24-28

<b>Monday 6/24</b>	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10:00-12pm	Introduction to Thermodynamics and Statistical Mechanics	David Albert
12-1:30pm	Lunch	
2-4pm	The Reversibility Objections, the Past Hypothesis, the Mentaculus, the Special Sciences	David Albert
5pm	BBQ on the Lawn	
<b>Tuesday 6/25</b>	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10:00-12pm	Laws. The nature of Statistical-Mechanical probabilities. The specialness of the initial conditions	David Albert
12-1:30pm	Lunch	
2-4pm	The epistemic and causal arrows of time	David Albert
4pm	Coffee in the lounge	
<b>Wednesday 6/26</b>	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10:00-12pm	Further considerations, and alternate perspectives, on the foundations of Statistical Mechanics and the nature of the special sciences	Craig Callender
12-1:30pm	Lunch	
2-4pm	The nature of time and the nature of law: a non-Humean account	Tim Maudlin
4pm	Coffee in Room 242	
4:45-6:15pm	Introductory and Foundational Remarks on Cosmology	Priyamvada Natarajan
<b>Thursday 6/27</b>	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10:00-12pm	Introduction of the foundations of Quantum Mechanics. The phenomenon of superposition. The Measurement Problem. Non-locality	David Albert
12-1:30pm	Lunch	
2-4pm	Survey of proposals for solving the measurement problem	David Albert
4pm	Coffee in Room 242	
4:45-6:15pm	The Life of Hugh Everett	Peter Byrne
<b>Friday 6/28</b>	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10:00-12pm	The architecture of fundamental theories. The idea of Typicality	Shelly Goldstein
12-1:30pm	Lunch	
2-4pm	The Many-Worlds Interpretation of Quantum Mechanics	David Wallace
4pm	Coffee in the lounge	

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### Week 2: July 1-5

<b>Monday 7/1</b>		
Time	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10-12pm	the History of Dark matter	Joel Primack
12-1:30pm	Lunch	
1:30-3pm	An introduction to General Relativity	Anthony Aguirre
3-3:30pm	Coffee in Room 242	
3:30-5pm	Quantizing gravity, and why it is difficult (?)	Leonard Susskind
<b>Tuesday 7/2</b>		
Time	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10-12pm	Introduction to Cosmology	Joel Primack
12-1:30pm	Lunch	
1:30-3pm	Introduction to the Cosmic Microwave Background and what it tells us	Matt Johnson
3-3:30pm	Coffee in Room 242	
3:30-5pm	Discussion	
<b>Wednesday 7/3</b>		
Time	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10-12pm	Inflation and its alternatives	Matt Johnson
12-1:30pm	Lunch	
1:30-3pm	Eternal Inflation and the multiverse	Anthony Aguirre
3-3:30pm	Coffee in Room 242	
3:30-5pm	Black holes?	Leonard Susskind
<b>Thursday 7/4</b>		
Time	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10-12pm	Observational Horizons in Early universe cosmology	Matt Johnson
12-1:30pm	Lunch	
1:30-3pm	Self-Sampling, Anthropics, Measures, and other thorny conundra	Anthony Aguirre
3-3:30pm	Coffee in Room 242	
3:30-5pm	Simulating the universe	Joel Primack
5pm	4th of July BBQ dinner (India Joze)	
<b>Friday 7/5</b>		
Time	Subject   Speaker	
9:30-10am	Coffee in Room 242	
10-12pm	The big picture of astrophysics; Long term future of astrophysical systems	Fred Adams
12-1:30pm	Lunch	
1:30-3pm	The black-hole information paradox, complementarity, and firewalls	Leonard Susskind
3-3:30pm	Coffee in Room 242	
3:30-5pm	Discussion	

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### Week 3: July 8-12

<b>Monday 7/8</b>	<b>Subject   Speaker</b>	
9:30-10am	Coffee in Room 242	
10-12pm	Lecture II	Fred Adams
12-1:30pm	Lunch	
1:30-3pm	Initial state/origin of the universe I	Sean Carroll
3-3:30pm	Coffee in Room 242	
3:30-5pm	Initial state/origin of the universe II	Sean Carroll
<b>Tuesday 7/9</b>	<b>Subject   Speaker</b>	
9:30-10am	Coffee in Room 242	
10-12pm	Comment on Carroll	Chris Smeenk
12-1:30pm	Lunch	
1:30-3pm	Fine-tuning I	Luke Barnes
3-3:30pm	Coffee in Room 242	
3:30-5pm	Fine-tuning II	Luke Barnes
<b>Wednesday 7/10</b>	<b>Subject   Speaker</b>	
9:30-10am	Coffee in Room 242	
10-12pm	Shortcomings of the inflationary paradigm	Anna Ijjas
12-1:30pm	Lunch	
1:30-3pm	Discussion	Ward Struyve
3-3:30pm	Coffee in Room 242	
3:30-5pm	Quantum foundations and cosmology	Ward Struyve
<b>Thursday 7/11</b>	<b>Subject   Speaker</b>	
9:30-10am	Coffee in Room 242	
10-12pm	Emergence of space time in quantum gravity	Tiziana Vistarini
12-1:30pm	Lunch	
1:30-3pm	Implications of cosmology for the philosophy of religion I	Alex Pruss
3-3:30pm	Coffee in Room 242	
3:30-5pm	Implications of cosmology for the philosophy of religion II	Alex Pruss
6:00 pm	Dinner: Alumni Room	
<b>Friday 7/12</b>	<b>Subject   Speaker</b>	
9:30-10am	Coffee in Room 242	
10-12pm	General Discussion I	
12-1:30pm	Lunch	
1:30-3pm	General Discussion II	
4pm	Coffee in the lounge	