

Seven Pines 2014

May 14–18, 2014

History of Quantum Mechanics: Beyond the Formative Period

Session 1: History since the 1970s

Speakers:

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| (a) <i>Arnold Sommerfeld</i> | Michael Eckert |
| (b) <i>Alternative interpretations of quantum mechanics since the 1970s</i> | Olival Freire |

Session 2: S-matrix and perturbation theory and Feynman diagrams

Speakers:

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| (a) <i>The quantum revolution as a Hacking-type revolution</i> | Sam Schweber |
| (b) <i>The exigencies of war or the stink of a theoretical problem?
Feynman's abandonment of the model of the quivering electron</i> | Adrian Wüthrich |

Session 3: Gauge theory and the Aharonov–Bohm effect

Speakers:

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| (a) <i>Gauge theory and the Aharonov–Bohm effect: the view from philosophy</i> | Katherine Brading |
| (b) <i>Some more recent ideas about the Aharonov–Bohm effect</i> | Richard Healey |

Session 4: Particles and fields in the interpretation of QFT

Speakers:

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| (a) <i>What role remains for quanta in quantum field theory?</i> | Doreen Fraser |
| (b) <i>Particles and fields in quantum field theory</i> | Jim Weatherall |

Session 5: Path integral and functional methods

Speakers:

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| (a) <i>Time Evolution of Path Integral Theory</i> | Philip Stamp |
| (b) <i>History of functional methods in quantum field theory</i> | Alex Blum |

Session 6: Quo vadis Quantum?

Speakers:

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| (a) <i>Current Status and Prospects</i> | Markus Aspelmeyer |
| (b) <i>The Future</i> | Bill Unruh |