



JUNE 9 - 11, 2021

Approximations in Physics: Historical and Philosophical Perspectives

HISTORICAL EPISTEMOLOGY OF THE FINAL THEORY PROGRAM

CO-ORGANIZED WITH DURHAM UNIVERSITY

WEDNESDAY, JUNE 09

14:45-15:00 CET (8:45-9:00 EDT)
Welcome and Opening Remarks

15:00-16:00 CET (9:00-10:00 EDT)
"Taking Approximations Seriously:
The Cases of the Chew and the
Nambu-Jona-Lasinio Models"
Pablo Ruiz de Olano, James Fraser,
Rocco Gaudenzi, and Alexander
Blum

16:00-16:15 CET (10:00-10:15 EDT)
Coffee Break

16:15-17:15 CET (10:15-11:15 EDT)
"Approximation in Newton's
Principia"
George Smith

17:15-17:30 CET (11:15-11:30 EDT)
Coffee Break

17:30-18:30 CET (11:30-12:30 EDT)
"How 'Wavelength' Found its
Truth-Values"
Mark Wilson

THURSDAY, JUNE 10

14:45-15:00 CET (8:45-9:00 EDT)
Day 1 Recap

15:00-16:00 CET (9:00-10:00 EDT)
"Ken Wilson and the Slicing
Method"
Sébastien Rivat

16:00-16:15 CET (10:00-10:15 EDT)
Coffee Break

16:15-17:15 CET (10:15-11:15 EDT)
"The Role of Approximation
Methods to Demonstrate the
Autonomy of Effective Theories"
Patricia Palacios

17:15-17:30 CET (11:15-11:30 EDT)
Coffee Break

17:30-18:30 CET (11:30-12:30 EDT)
"Approximations to What Exactly?"
Michael Miller

FRIDAY, JUNE 11

14:45-15:00 CET (8:45-9:00 EDT)
Day 2 Recap

15:00-16:00 CET (9:00-10:00 EDT)
"Computational Methods in
Microphysics in the 1950s:
Approximation, Technique or
Theory?"
Arianna Borrelli

16:00-16:15 CET (10:00-10:15 EDT)
Coffee Break

16:15-17:15 CET (10:15-11:15 EDT)
"The Role of Approximation
Methods in Observing
Gravitational Waves"
Alessandra Buonanno

17:15-17:30 CET (11:15-11:30 EDT)
Coffee Break

17:30-18:30 CET (11:30-12:30 EDT)
Final Discussion and Follow-up
Plans

Introductory comments by
Eric Winsberg