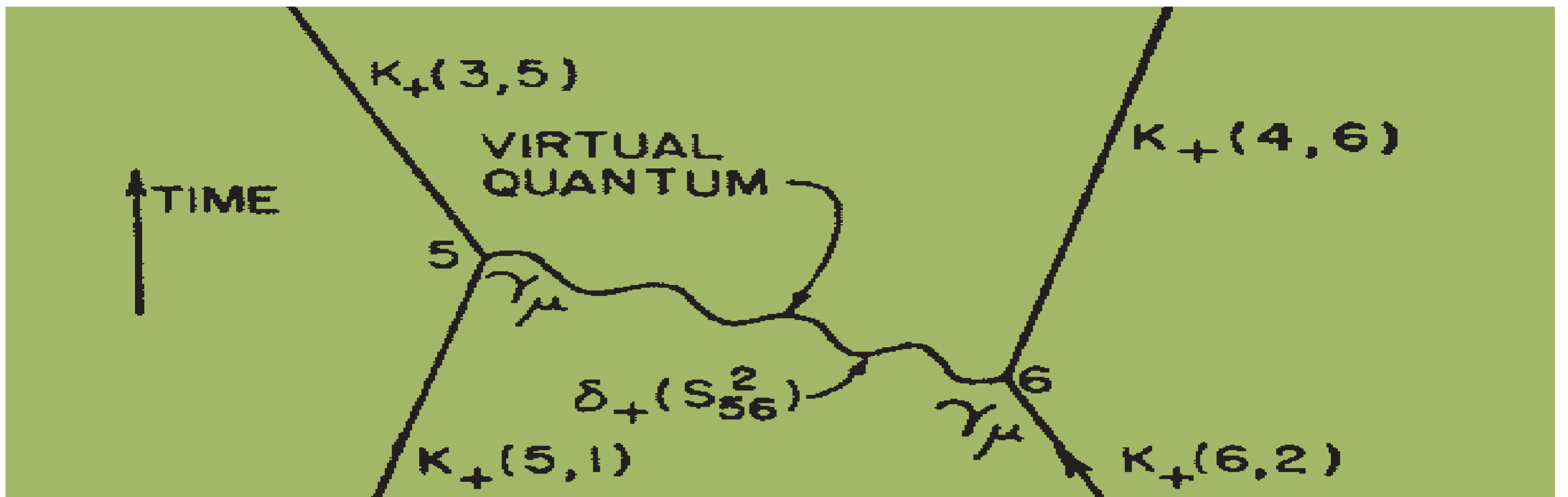


HISTORICAL EPISTEMOLOGY OF THE FINAL THEORY PROGRAM



# Approximations to Second Order: Historical and Philosophical Perspectives

## TUESDAY JULY 12

10:45–11:00

Introduction and Welcome

11:00–12:00

Too Strong for Perturbation Theory? Putting the Yukawa Theory to Work: 1935–1949

**Pablo Ruiz de Olano**

12:00–12:15

Coffee Break

12:15–13:15

Narrative Knowing and Approximations in High-Energy Physics

**Arianna Borrelli**

13:15–13:30

Discussion

13:30–14:30

Lunch Break

14:30–15:30

Steve Weinberg and the Rise of Systematic Low-Energy Approximations

**Sébastien Rivat**

15:30–15:45

Coffee Break

15:45–16:45

Nothing Comes from Nothing but the Rho Meson: the Origin of the Bootstrap Notion in Particle Physics

**Jens Salomon & Alexander Blum**

16:45–17:45

Discussion Day 1

## WEDNESDAY JULY 13

10:45–11:00

Recap Day 1

11:00–12:00

Tensor Networks: Entanglement and the Simulation of Quantum Many-Body Problems

**Mari Carmen Bañuls**

12:00–12:15

Coffee Break

12:15–13:15

The Logic and Semantics of Approximation in Models and their Solutions

**Nicolas Fillion**

13:15–13:30

Discussion

13:30–14:30

Lunch Break

14:30–15:30

On the Common Structure of Perturbative and Axiomatic Field Theory in Borel Summable Models

**Michael Miller**

15:30–15:45

Coffee Break

15:45–16:45

Reformulations in Perturbative Quantum Field Theory

**Josh Hunt**

16:45–17:45

Discussion Day 2

19:00

Conference Dinner

## THURSDAY JULY 14

10:45–11:00

Recap Day 2

11:00–12:00

Approximations in Newton's *Principia*

**George Smith**

12:00–12:15

Coffee Break

12:15–13:15

The Role of Approximation Thought in the Development of the Hamilton-Jacobi Theory

**Michiyo Nakane**

13:15–13:30

Discussion

13:30–14:30

Lunch Break

14:30–15:30

Approximation with or without Method

**Monica Solomon**

15:30–15:45

Coffee Break

15:45–16:45

Rigorous Approximation: The Origins of the Causal Perturbation Theory Programme

**James Fraser & Alexander Blum**

16:45–17:45

Discussion Day 3 & Wrap Up