



**ICTP  
SAIFR**

International Centre  
for Theoretical Physics  
South American Institute  
for Fundamental Research



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**PRINCIPIA**

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**May 4 – 8, 2026**

**THEORY MEETS PRACTICE:  
ENERGY CORRELATORS AND  
DETECTOR OPERATORS**

Detector operators have emerged as a bridge between modern developments in formal QFT and real-world phenomenology. These observables, which are direct theoretical models of collider experiments, have enabled precision extractions of Standard Model parameters, measurements of Quark–Gluon Plasma properties, and have been central to contemporary developments in QFT. Many of these developments have been driven by explicit calculations in conformal field theories, most notably  $N=4$  super Yang–Mills theory.

This 5-day workshop will bring together researchers working on detector operators and their applications to particle colliders, as well as those interested in studying these observables through modern bootstrap, integrability and amplitudes methods.

The format will include only a few seminars per day with lots of time for discussion and collaboration.

**Application deadline:**

**March 1, 2026**

**Online application and  
more information:**

**[ictp-saifr.org/tmpecdo2026](https://ictp-saifr.org/tmpecdo2026)**



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