

Belle II

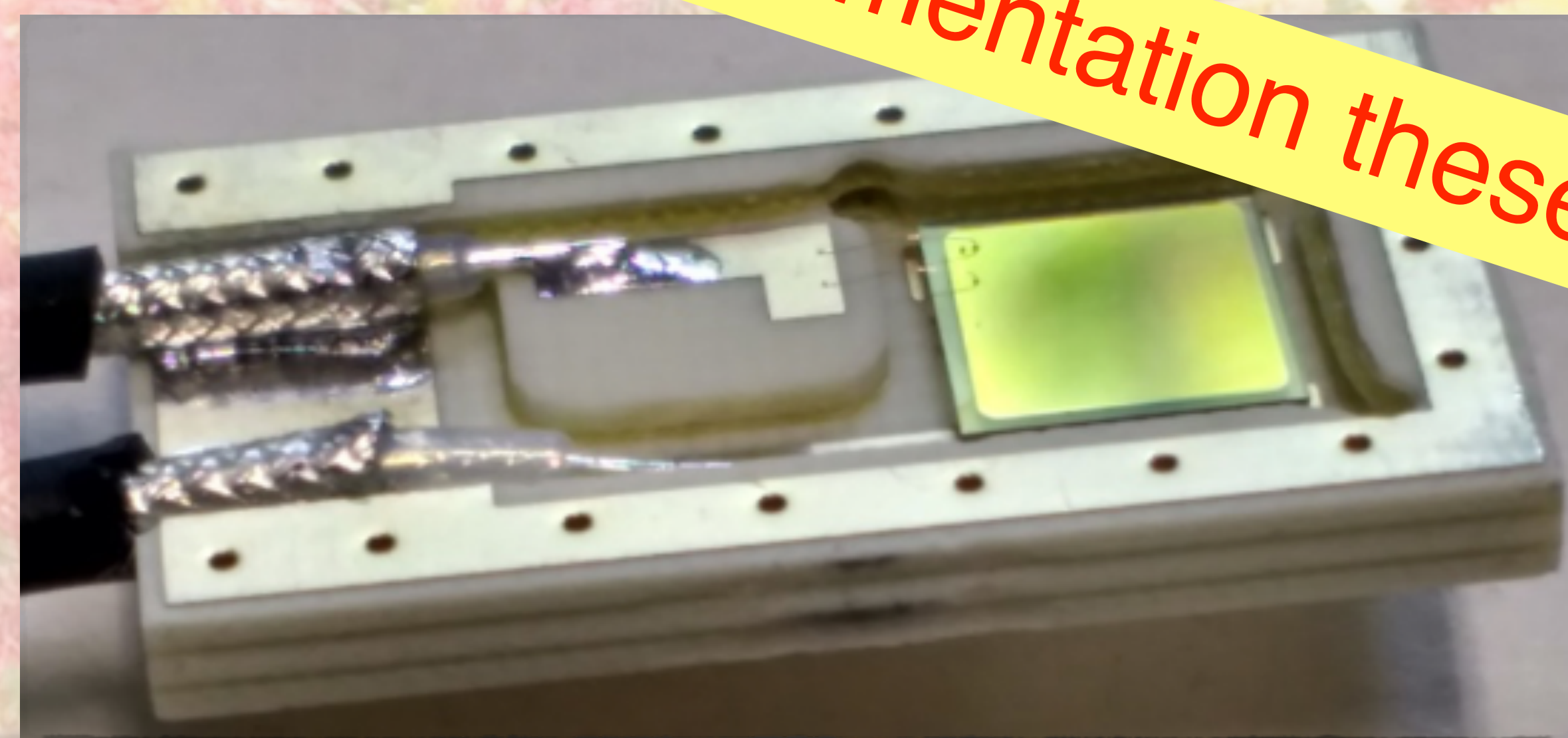
Opportunities

Eager to spend long hours in a lab, busy with sophisticated instrumentation? Enjoy getting state-of-the-art particle sensors to work? Feel like a microelectronics wizard?

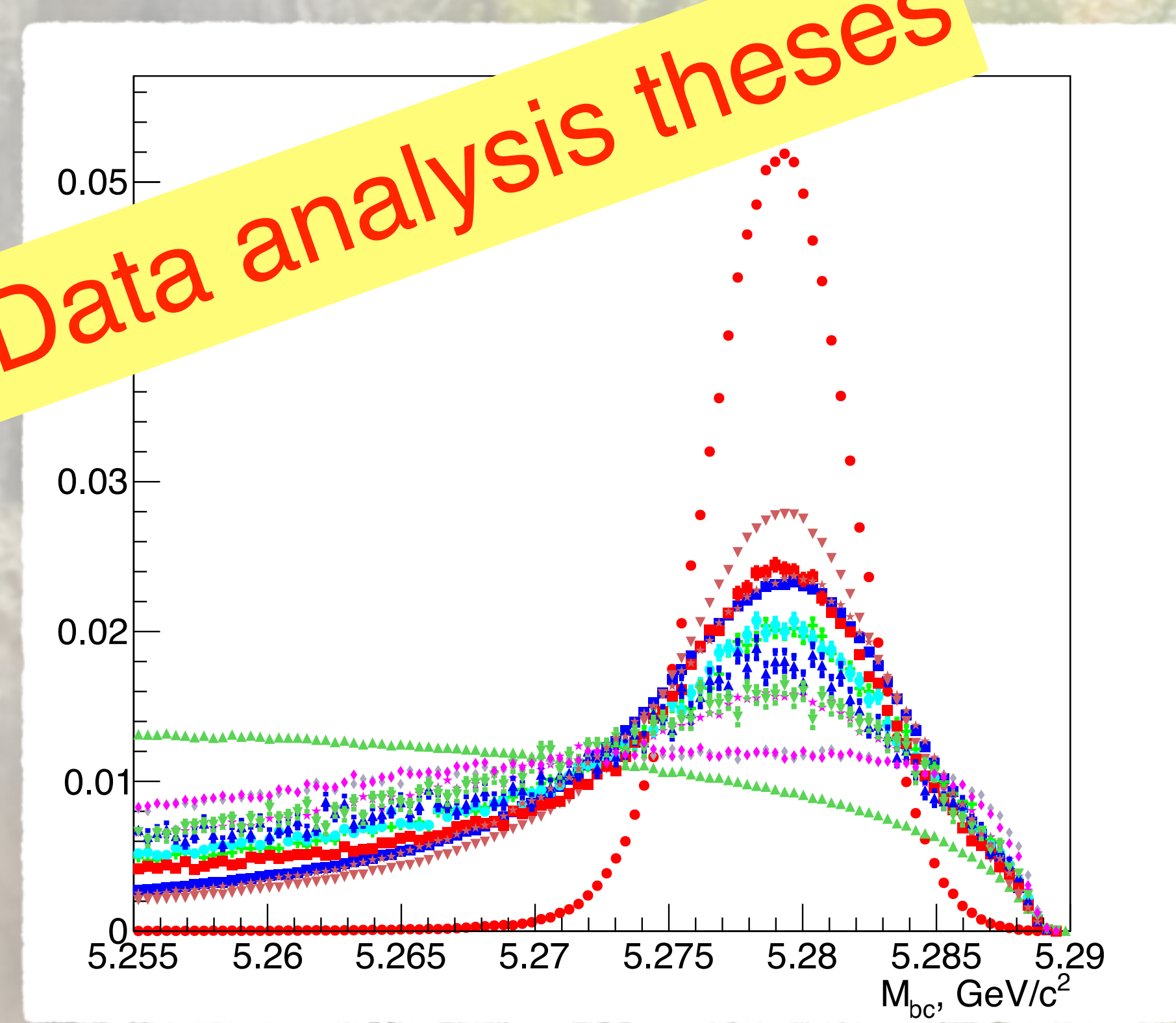
Join us in the construction, characterisation, and testing of the 20 single-crystal diamond sensors that will monitor radiation harmful for the vertex silicon tracker — the heart of Belle II. Our diamonds will record instantaneous and integrated doses and trigger the beam abort if conditions get unsafe.

You can also participate in our long-standing, world-class effort in developing novel silicon-sensor technologies.

You will explore uncharted territory in advanced instrumentation.



Instrumentation theses



Data analysis theses

Wanna publish world-class results on fundamental standard-model parameters? Keen to prove your worth over the subtleties of machine-learning? Feel like a coding guru?

Join us in the physics analysis of 10^9 e^+e^- collisions recorded by Belle: 2 PB of digitized signals from the $O(10)$ particles that hit the 10^5 channels in each collision. You'll lead the analysis of a B meson decay, from sample selection, through fitting the relevant distributions, to determining systematic uncertainties. **You'll torture the data until they confess the response.**

Come talk to us. We offer many theses at the instrumentation and intensity frontiers — a demanding, exciting challenge that requires you to work in the Area di Ricerca and travel to Japan.

<https://web.infn.it/Belle-II/index.php/italian-sites/trieste/lorenzo.vitale/livio.lanceri/diego.tonelli/> @ts.infn.it

