

French in-kind contribution to the ESS instrument suite

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The ESS (European Spallation Source) is the next generation European neutron source currently being built in **Lund, Sweden**. As most of the spallation source around the world, the ESS is a pulsed source with a 14 Hz high brilliance pulse. Its particularity comes from the long pulse (~3 ms) generating as much neutrons as the best reactors such as the ILL. The full use of the polychromatic pulsed beam through time of flight data collection will deliver to end users an unprecedented neutron flux. Combined with a state of the art instrumentation, it will pave the road for new experiments.

Fifteen instruments are scheduled in the first tranche. The first ones will be opened to users in 2025. The construction is **made by in-kind contributions** from European partners.

In this framework, **France is contributing** to the ESS instrumentation through the LLB and the associated institutes (CEA and CNRS). Personnel is working towards design, construction, delivery and commissioning of 7 Work Packages. These contributions (briefly presented below) amount to a **total of 35 M€₂₀₁₃**.

