

# The 43rd International Symposium on Physics in Collision - PIC 2024



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## Borexino and the Sun

*Wednesday 23 October 2024 14:20 (20 minutes)*

I will review the story of Borexino at Gran Sasso in the light of our understanding of the working principle of the Sun with the original hypothesis put forth by Bethe, Gamow and von Weizsacker in 1938. From the design to the radiopurity tests and the evolution of the project, the solution of several technical challenges led to a thorough real-time understanding of the nuclear reactions taking place inside the core of our star, both for the pp and the CNO cycles. This constitutes the final experimental confirmation of the 1938 predictions, which also applies for all the stars in the Main Sequence.

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