

Poster Presentation

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Auguste Bravais: a major human contribution

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Auguste Bravais by his fundamental work on lattice has pioneered modern crystallography. He was born in 1811 in Annonay (France) at a short distance from Lyon and Saint-Etienne. He was then educated at the College Stanislas in Paris and entered the École Polytechnique in Paris in 1829. In 1832, he joined the French Navy as an officer and took part at scientific explorations to the Algerian Coast and Northern Europe. In 1837 he defended a PhD in Astronomy at the Faculty of Sciences in Lyon where he became Professor in 1841 to teach mathematics in astronomy. Then, in 1845, he moved at Ecole Polytechnique in Paris to take the chair of Physics, which he held till 1856. He published his first studies dealing with crystal lattice in 1849 in a short paper [1] and later wrote a book where he developed his theory fully based on geometrical theorems [2]. He died prematurely in 1863 exhausted by the loss of his only son. Like many scientists of that time Auguste Bravais was universalist and has been successively astronomer, geologist, mathematician, physicist, mineralogist, and crystallographer as well as an explorer from Lapland to the top of Mont Blanc [3]. In this communication, the steering committee Lyon-Saint-Etienne will recall the contribution of Auguste Bravais to crystallography and will show some aspect of his life that may be less known in our community.

[1] A. Bravais *J. Math. Pure Appl.* 1849, 14, [2] A. Bravais *Etudes Cristallographiques* Gauthier-Villars, 1866, [3] M-H. Reynaud, *Auguste Bravais: de la Laponie au Mont-Blanc* Editions du Vivarais - 1991



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