4th World Conference on Physics Education

EMBRACING CHANGES TOGETHER

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Connecting with quantum: Examining the educational value of the Bohr atomic model using embodied cognition and variation theory

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Teaching quantum physics requires teachers to be mindful of how students connect bodily experiences with abstract models. However, the abstract nature of the quantum realm implies a lack of well-functioning real-world analogies. In the current study, we examine the prominent Bohr atomic model and its presence in educational materials through the joint lens of embodied cognition and variation theory. Together, these two theoretical perspectives open up new ways of seeing educational values and pitfalls in the use of the Bohr atomic model. Finally, this approach can be used to make suggestions on designing teaching sequences and materials.

How would you like to present your contribution?

Live in Kraków (time slot to be allotted based on the programme)

Target education level

General

Category

Formal Education

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