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Title:

How do undergraduate students studying nanoscience understand "size and scale"? Results from an exploratory interview study

Abstract:

It is often assumed that undergraduate students come to college with a firm understanding of the concept "size and scale", a key idea to the learning of nanoscience. However, a preliminary interview study revealed that, contrary to this belief, many students have difficulty grasping the idea of "size and scale", particularly when non-visible objects are involved. In this talk, we will share our findings regarding the different types of understandings students construct for "size and scale", and discuss the development and administration of assessment items that might capture such variations.