

## **SYMPAB - (16400) - MANY MODELS THINKING AND ITS POTENTIAL FOR THEORY DEVELOPMENT**

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### **Short Abstract**

*Being able to apply science ideas to make sense of the natural and engineered world around us is undoubtedly a central ability in our modern society. Therefore, this ability and its diagnosis and promotion has been described within numerous theoretical models, e.g., within models of competence. In most cases, these theoretical models provide a similar vision of their goals for science education, however, there is a lot of variation in how exactly they shape science learning. Although each of these theoretical models provides valuable implications, it is challenging to balance all of them within science education. To be able to balance these different theoretical models and combine their best aspects to optimize science education, many models thinking, which has been used with great success in other domains, seems to be a promising approach. This approach argues for complementing a multitude of theoretical models to make sense of complex phenomena – and science learning certainly is a complex phenomenon. For this reason, we aim at starting a conversation about how many models thinking can successfully be applied in science education. In this symposium contribution we will give deeper insights in the approach of many models thinking and further present Blömeke et al's continuum model as a common frame of reference against which different theoretical lenses can be compared and contrasted.*