

Creative science|arts pedagogies for the next generation of physicists

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Scientific developments have seen reality dissolved into smaller and smaller invisible particles that the physicist has to make visible. This journey, from something hidden to something revealed, is mirrored by the artist attempting to express thoughts and emotions through the manipulation of materials in visual arts, or the movements of the human body in dance. This – potentially unexpected but remarkable – similarity in the creative processes of science and art, provides a unique basis for novel science|arts approaches to enthuse students regarding STEM subjects. Workshops for school children of a wide age range, that stimulate inquiry and enhance learning through creative activities, have been developed, where physics concepts are communicated through visual arts and dance. The development, trialling, and evaluation of these workshops is presented and discussed. Reflections on the experience acquired by engaging in transdisciplinary science|art pedagogical activities are summarised.

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