



UNIVERSITY OF
BIRMINGHAM

SCHOOL OF
PHYSICS AND
ASTRONOMY

Physics and Dance



Physicists have developed a simple and comprehensive theory, **The Standard Model**, that describes the particles that make up the world and their complex interactions in the universe. Drawing inspiration from different particles' qualities, students are invited to transform them through dance and music, in order to understand basic physics elements using their imagination.

A **free** whole-day **workshop** (10:00-15:00) is offered to groups of sixteen maximum **year 7 and year 8** secondary school students in their school premises. **The use of school gym is essential for the day.** The programme includes: (i) introduction to particle physics, (ii) interpretation through art, (iii) movement interpretation - finding a movement for each particle considering its characteristics (mass, behaviour) and associating a melody and a rhythm to each one of them (iv) introduction to particle movement patterns in space, and an itinerary for each particle (v) Particle interactions: working in duets and small groups, children interact with each other to form particle "relationships". (vi) Mixing itineraries and interactions together (vii) Creating a theatrical storyline and a performance (viii) Group discussion and feedback.

The workshop is aimed at students who are interested in dance, the creative arts and are interested in the fundamental questions of what are we made of and how does the universe work. The workshop has links with both the **science curriculum** and the **arts curriculum (dance)**.

Available dates are:

from 19/2/2018 to 2/3/2018.

To book, please contact M.Pavlidou@bham.ac.uk specifying the date you would like the "Physics and Dance" team to run the workshop at your school.

