

Exploring the sound of string theory

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A new collaboration between physicists and sound artists at Queen Mary, University of London, has produced a sonification of string theory equations. The project is being unveiled at a concert on 5 and 6 November, 2011.

Flow Motion are electronic musicians and sound [artists](#) Anna Piva and Edward George, formerly artists in residence at Queen Mary. They produce multimedia installations and sound art performances based on academic research.

During their residency at Queen Mary, Flow Motion collaborated with Dr David Berman from the School of Physics and Astronomy, and Dr James Sparks, Mathematical Physicist at the University of Oxford, to explore the relationship of ideas of string theory with sound and music.

Their latest project, *Explorations in Eleven Dimensions*, will have as its basis the [sonification](#) of Dr Berman's string theory equations, and a series of explorations of frequency and micro-tonality in the work of Bach and Debussy with Dr Sparks.

Dr Berman explains: "The cutting edge of science has always impacted the music and art world; Einstein's relativity and the world of quantum mechanics has been influencing artists for 100 years. Now string theory is at the cutting edge of physics and the interest by artists in the challenging concepts of theoretical physics continues. We have been exploring the relationship between the cutting edge of science and that of [sound](#) art."

String theory attempts to provide a complete, unified, and consistent description of the fundamental structure of our universe, and is often referred to as the theory of everything. The Centre for Research in [String Theory](#) at Queen Mary aims to expand our knowledge of string and quantum field theories both at the conceptual and the computational level.

Flow Motion will be joined for the performance by a quartet of musicians from London's classical and improvised music scene.

The performance will be followed by a talk by Flow Motion, Dr Berman, and Dr Sparks.

More information: Explorations in Eleven Dimensions will be held on Saturday 5 November and Sunday 6 November at 7.30pm in The Octagon, Queen Mary University of London.

Provided by Queen Mary, University of London

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