

EDUCATION

Primary lights

Scientific awareness is one of SOLEIL's missions and for over 10 years it has attempted to share scientific and technical knowledge with the general public. As 2015 was the Year of Light, this was a perfect excuse to develop a new project for 8 to 11-year-old pupils and their teachers.



From 2002, even before its facilities were built, SOLEIL was already going out to meet its young public: educational workshops were being run for secondary school classes in the Ile de France Region. This approach, based on education/research, has continued to grow and, since 2004, more than 3,000 pupils and students (out of the approximately 5,000 annual visitors) have come to the synchrotron to follow interactive presentations aimed at every age and level, to interact with SOLEIL staff and visit the science facilities. This is great opportunity to make science more meaningful for all these youngsters.

Until now the audience for these presentations has been at least 12 years old. The "Primary Lights" project is intended to broaden this approach by specifically addressing 8-11 year-old pupils.

The initial contact takes place through teachers, who are offered training and science awareness exercises. In turn, they can then introduce pupils to several approaches to the investigative process: starting with what children know (or think they know) on the themes of «light, shadow and color» and then encouraging them to start asking questions, with the experimental process itself providing the answers. In other words, getting them to take a scientific approach!

To help teachers, an educational kit is available, containing the equipment needed to design and carry out these experiments with small groups.

And the icing on the cake: at the end of these workshops the children prepare a show in a shadow theater designed specifically for the project, where art meets science.

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The project in 3 points

- 1 Primary Lights was developed through a partnership between the SOLEIL synchrotron and Management of the National Education Services of Yvelines, in collaboration with three Yvelines school teachers and an educational consultant
- 2 Primary school pupils of the three teachers involved in the project were the first to try out the workshops: the «Shadow» set-up with Poirier-Saint-Martin School (Montigny-le-Bretonneux), «Light» with the Francis Poulenc School (Guyancourt) and «Color» with the Bois de la Garenne School (Voisins-le-Bretonneux).
- 3 In 2015-2016 the project will be used in 10 classes in Yvelines, before being extended to other Departments, including Essonne, in the years to come.