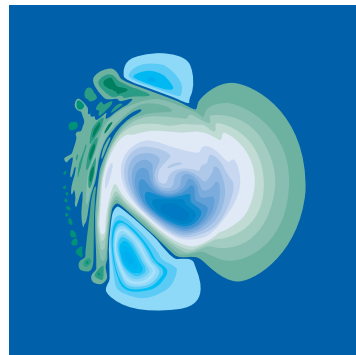
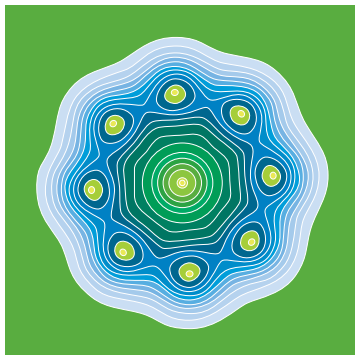
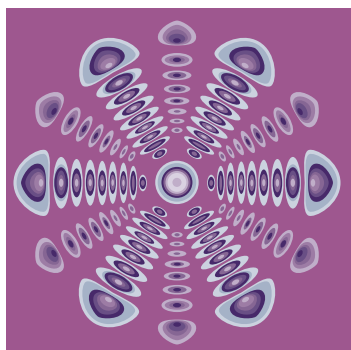


Above
R V Lapshin 2004 *Nanotechnology*
Below left to right
Cheol Park et al 2003 *Nanotechnology*
T Prus et al 2004 *Journal of Physics: Condensed Matter*
F Liu et al 2004 *Nanotechnology*
C Bruma et al 2003 *Plasma Physics & Controlled Fusion*





Top Jong-Hwan Yoon and Sang-Joon Lee 2003 *Measurement Science & Technology*
 Above lt/rt O A Shenderova et al 2001 *Nanotechnology* / C Gray et al 2004 *Reports on Progress in Physics*

FRÉDÉRIQUE SWIST DESIGNER

WORDS BY GABRIELLE STACKPOOL

At first The Institute of Physics Publishing in Bristol seems like an unlikely place to find one of Bristol's most prolific and interesting designers. But Frédérique Swist, senior designer at the Institute is proof that the relationship between art and science is flourishing and that the two disciplines are inextricably linked. From the Egyptian pyramids through to Georges Seurat who studied the physics of colour as an art student in Paris, and more recently Andy Goldsworthy who manipulates science and nature to make us see things around us that were there all along, it's a relationship that has produced the world's greatest artists and artworks.

Frédérique works in collaboration with her Art Director Andrew Giaquinto with support from her Managing Director Jerry Cowhig, and in the last three years she has been experimenting and developing her work.

The Institute's core business is publishing academic journals for international research centres and universities; however an important objective is to raise the profile of physics within the community and Frédérique's images are helping by illustrating journal covers, posters, publicity material, and by making the messages more accessible to the community. "We want to reach out to people" explains Andrew "like texting for example, everyone uses it, and its changing language, and its all come about by the application of physics."

So, where do the images come from? "I start with a graph, or scientific image or drawing from a journal" Frédérique says as she flicks through a rather scary looking

mathematical text book, "and I look for a drawing which is visually attractive and would work outside of the context of the book. Then I digitally manipulate the colour, shape and composition so I arrive at something which is quite a change from the original image." The original image could be a line drawing of a physics experiment or from a photo taken under a neutron microscope; what emerges is a beautiful, striking, compositionally perfect print. As Frédérique says "The subject matter is usually invisible to the naked eye, and through graphic manipulation we allow the eye to travel through a scientific journey, thus appreciating and discovering the subject from a different perspective". "I like to include a reference to the original subject matter so that people can appreciate where it came from," she says. The images have a rather psychedelic quality to them, like looking at a particularly brilliant kaleidoscope. "Yes" laughs Frédérique "they do have that 60's psychedelic feel to them." We both agree that they would make great textile prints, so it's no surprise that she is also involved in fashion illustration and website design. You can see Fred's work for yourself (by appointment) at the Institute of Physics headquarters in Portland Place, London in the form of seven limited edition prints, one of which was selected for the Print Exhibition 2004 at The Royal West of England Academy in Bristol. ●

You can contact Frédérique at the Institute of Physics Publishing at Temple Back, Bristol, Tel 0117 930 1075, email fred.swist@iop.org for more information



THE BRISTOL ARTIST THAT'S HELPING TO RAISE THE PROFILE OF PHYSIC'S THROUGH HER VIBRANT WORK SHARES SOME OF HER SECRETS