



### *Particle detectors: they're nearer than you think*

When he was in Amsterdam, **Marcel Demarteau** was a Bijzonder Hoogleraar. That's 'professor of physics' to you. Marcel deals in particle detectors, which means he takes pictures of particle collisions and figures out ways to make the picture clearer. People often comment that Marcel should stop recording collisions and start recording something less messy and violent, but Marcel understands that, when particles collide, they reveal life forces that, if well understood, make for a better, more grandly unified world. Marcel is a physicist at Argonne National Laboratory outside Chicago.



### *Seeking hidden dimensions*

**Brian Foster** is so in demand as a physicist, he has to put up with the attendant, involuntary habit of spending an inordinate amount of time in and around airplanes, airports and departure lounges. This also keeps him from fully pursuing other interests – playing violin, reading modern novels and watching soccer games. Despite these deprivations, he is faithful to his profession, seeking what the universe hasn't yet revealed to us. Brian is a professor of experimental physics at the University of Oxford.

### *Stimulating particle simulations*

**Junpei Fujimoto** uses his computer as the crystal ball that predicts particle behavior. Of course, unlike a crystal ball, the computer has to be fed some information before it can say anything useful, which renders it somewhat less user-friendly than a crystal ball. However, Junpei is such a master at feeding it information and so fluent in computer languages, he puts other fortunetellers to shame. A passionate advocate for physics outreach, Junpei is a physicist at KEK laboratory in Japan.

## *Neutrinos from outer space!*



**Garabed Halladjian** was fascinated when he realized that the most beautiful symphonies and the stars follow the same laws. To comprehend the nature of time, he started to submerge himself in physics and philosophy. Currently, he is a post-doctoral physicist with the University of Iowa and is stationed at CERN, the European particle physics laboratory based in Switzerland. There, he searches for new unknown particles to uncover new and mysterious laws of nature. While earning his PhD, Garabed taught special relativity, quantum mechanics, non-Euclidian geometry... and he studied the high-energy cosmic neutrinos emitted from the most violent regions of the universe. And if you don't know what neutrinos are, he can tell you all about them.



## *An illumination of dark matter*

**JoAnne Hewett** took her first physics class as a sophomore in college, was immediately hooked, and embarked on a career of performing esoteric theoretical calculations. Her research probes the fundamental nature of space, matter, and energy, where she most enjoys devising experimental tests for preposterous theoretical models. JoAnne works at the SLAC National Accelerator Laboratory at Stanford, where she is a professor of theoretical physics.



### *Why physics, dude?*

When **Marc Wenskat** was a child, he broke a lot of stuff because he was always curious. At least that was his excuse. In school he was kind of lazy and dumped a few science courses until he started to understand how fascinating and interesting, funny and philosophical science, and especially physics, can be. Now he wants his PhD. As a scientist at the German laboratory called DESY (pronounced 'daisy'), he deals with superconducting cavities, the components in a particle accelerator that bring the energy, the 'speed', to particles. If you're lucky, he'll also bring you up to speed.