An Investment in UT Brings French Ingenuity to Texas

TEXAS AND FRANCE may not seem to have much in common, but both have a rich, storied past, and an intertwined history: France once had a colony in what is now Texas, both now have cities named Paris, and both are major players on the economic world stage. Today France and Texas also share something—or rather someone—else: renowned French mathematician and engineer Francois Baccelli. His innovative work has the potential to bring us all closer together.

Francois Baccelli

Baccelli joined The University of Texas (UT) at Austin in fall 2012 as the first holder of the *Simons Chair in Mathematics and Electrical and Computer Engineering.* A member of the French Academy of Sciences, Baccelli researches the intersection of mathematics, telecommunications, and network information theory. Figuring prominently in his work is the analysis of random phenomena, a branch of mathematics concerning probability.

As a global thought leader in those fields, Baccelli has forged deep industry connections, applying his powerful concepts to help guide evolving cellular phone technology that is ubiquitous in modern life. As part of his appointment, he will share his cutting-edge expertise, both in the classroom and in research labs, with some of UT's best students. Imagine the ideas that type of interaction will spark.

"Thanks to the Simons Chair, UT Austin students will be exposed to the probabilistic tools I am currently developing," says Baccelli, who notes that his work will likely have practical applications. "Research funded by the chair is expected to have a direct impact on the design of future wireless networks."

The Simons Foundation, dedicated to advancing research in mathematics and science, made the new chair possible when it selected UT Austin as one of the first recipients of its Math+X grants. The $1.5 million grant, which was matched by the university, is designed to encourage novel collaborations between math and other fields. Nearly $1.3 million in additional foundation funding will support graduate students, postdoctoral fellows, and other grants at Baccelli's discretion.

As holder of the chair, Baccelli also is tasked with developing UT Austin's new Center in Information and Network Science, which will bring together interdisciplinary faculty to seek governing principles common to a wide array of network applications, from communications to biology and the social sciences.

"He is the right glue to hold the two sides of the new center together," says Alan Reid, chair of the Department of Mathematics in the College of Natural Sciences. "He's a mathematician by training who has a strong track record of research in electrical and computer engineering. He's also had a great deal of experience building up the kind of program we envision here."

Baccelli's appointment to the Simons Chair in Mathematics and Electrical and Computer Engineering gives Texas the prestige of an internationally celebrated scholar, new opportunities to enhance students' learning, and the prospect of technical advances that could kindle globe-spanning innovations in communications and other fields.

Welcome to Texas, Dr. Baccelli! *Vive la France*—and Hook 'Em Horns.