**Connecting Art and Mathematics**

**Carlo Sequin**

University of California, Berkeley
11:00am - 12:00pm in FB 141

Wednesday, April 19th, 2017

I have been fascinated by geometry since high school.  In most of my professional assignments I have been able to find some intriguing geometric challenges:  laying out the circuit of solid-state image sensors at Bell Labs or of the first RISC chip at UC Berkeley; in defining the architectural organization of Soda Hall (our computer science building); or in the optimization of NC-machine tool paths for the milling of smooth, free-form surfaces.  During the last two decades I have been collaborating with artists and with mathematicians and used the emergence of 3D-printers to create many maquettes of abstract geometrical sculptures as well as mathematical visualization models (e.g., of higher-genus Klein bottles or N-dimensional Platonic solids).  My professional work and my hobby activities have now become indistinguishable.

***Biography:***

Carlo H. Séquin is Professor Emeritus of Computer Science at the University of California, Berkeley.  He received his Ph.D. degree in experimental physics from the University of Basel, Switzerland in 1969.  From 1970 till 1976 he worked at Bell Telephone Laboratories, Murray Hill, NJ, on the design and investigation of Charge-Coupled Devices for imaging and signal processing applications.  In 1977 he joined the faculty in the EECS Department at Berkeley and served as Chair of the Computer Science Division from 1980 till 1983.  Since then he has concentrated on computer graphics, geometric modeling, and on the development of computer aided design (CAD) tools for circuit designers, architects, and for mechanical engineers.  Since the mid-1990’s, Séquin's work in computer graphics and in geometric design have provided a bridge to the world of art, and he has designed many abstract geometric sculptures, some of which have been realized in bronze, fiber glass, or granite.