

Short biosketch for Stephen Grossberg

Stephen Grossberg is Wang Professor of Cognitive and Neural Systems; Professor of Mathematics, Psychological & Brain Sciences, and Biomedical Engineering; and Director of the Center for Adaptive Systems at Boston University. He is a principal founder and current research leader in computational neuroscience, connectionist cognitive science, and neuromorphic technology. In 1957-1958, he introduced the paradigm of using systems of nonlinear differential equations to develop models that link brain mechanisms to mental functions, including widely used equations for short-term memory (STM), or neuronal activation; medium-term memory (MTM), or activity-dependent habituation; and long-term memory (LTM), or neuronal learning. His work focuses upon how individuals adapt autonomously in real-time to unexpected environmental challenges, and includes models of vision and visual cognition; object, scene, and event learning and recognition; audition, speech, and language learning and recognition; development; cognitive information processing; reinforcement learning and cognitive-emotional interactions; consciousness; visual and path integration navigational learning and performance; social cognition and imitation learning; sensory-motor learning, control, and planning; mental disorders; mathematical analysis of neural networks; experimental design and collaborations; and applications to neuromorphic technology. Grossberg founded key infrastructure of the field of neural networks, including the International Neural Network Society and the journal *Neural Networks*, and has served on the editorial boards of 30 journals. He is a fellow of AERA, APA, APS, IEEE, INNS, MDRS, and SEP. He has published 17 books or journal special issues, over 550 research articles, and has 7 patents. He was most recently awarded the 2015 Norman Anderson Lifetime Achievement Award of the Society of Experimental Psychologists (SEP), and the 2017 Frank Rosenblatt award of the Institute for Electrical and Electronics Engineers (IEEE). See the following web pages for further information:

<http://cns.bu.edu/~steve>

http://en.wikipedia.org/wiki/Stephen_Grossberg

<http://cns.bu.edu/~steve/GrossbergNNeitorial2010.pdf>

<http://scholar.google.com/citations?user=3BIV70wAAAAJ&hl=en>

<http://www.bu.edu/research/articles/steve-grossberg-psychologist-brain-research/>

<http://www.bu.edu/research/articles/stephen-grossberg-ieee-frank-rosenblatt-award/>