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Bio

Johann W. Kolar joined the Swiss Federal Institute of Technology (ETH Zurich) in 2001 as the Head of the Power Electronic Systems Laboratory after spending 15 years as an international consultant and independent researcher. During his career, he has proposed numerous novel converter concepts, including the Vienna Rectifier and the Sparse Matrix Converter, spearheaded the development of x-million rpm motors, and pioneered fully automated multi-objective power electronics design procedures. He has personally supervised 90+ PhD students to completion, has extensively published in the IEEE Transactions, is named inventor in numerous granted patents, and has received several awards. As a Prof. emeritus (since 08/2024), he is actively continuing to pursue research in ultra-compact/efficient WBG converter systems, AI and ML applications in power electronics, Solid-State Transformers, and the life cycle analysis of power electronics converter systems. He is an international member of the US National Academy of Engineering (NAE) and an IEEE Fellow.