

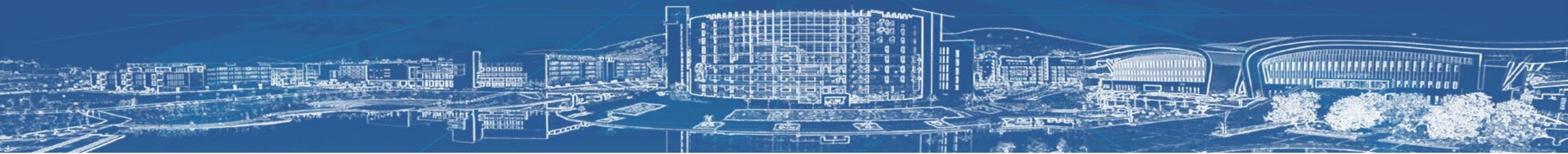


海外专家系列报告——基于verilog的电机控制技术

时间：2024年9月2日下午/9日上午

线下报告：文昌校区教四楼101

欢迎全校师生参加！

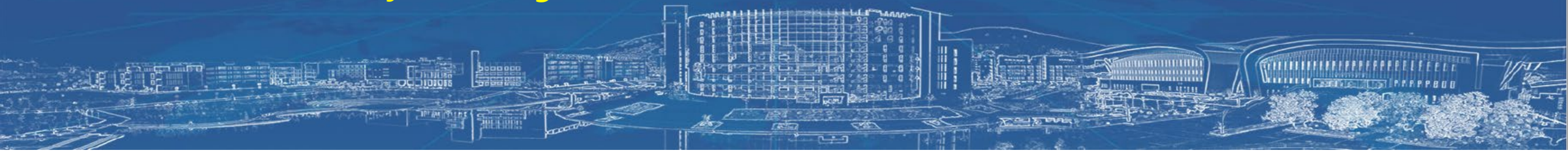




- 学术报告1: Introduction and basic knowledge of motor control technology based on verilog
- 报告人: Yassen Vladimirov Gorbounov University of Mining and Geology “St. Ivan Rilski” Bulgaria
- 时间: 9月2日15:00-16:00
- 报告简介: The motor control technology based on Verilog is a method of applying hardware description language Verilog to the design of motor control system. Verilog, as a powerful hardware description language, can accurately describe the structure and behavior of digital circuits, so it has a wide application prospect in the field of motor control. FPGA has powerful parallel processing capability and high flexibility, and can execute complex control algorithms in real time. In motor control, this kind of high performance and real-time performance is particularly important. With the continuous optimization and complexity of motor control algorithms, FPGA can provide faster calculation speed and higher response ability to ensure the stability and reliability of motor control systems. This report will introduce some basic knowledge of such as Computer architectures, finite state machines, PWM, positional feedback - encoders and so on.



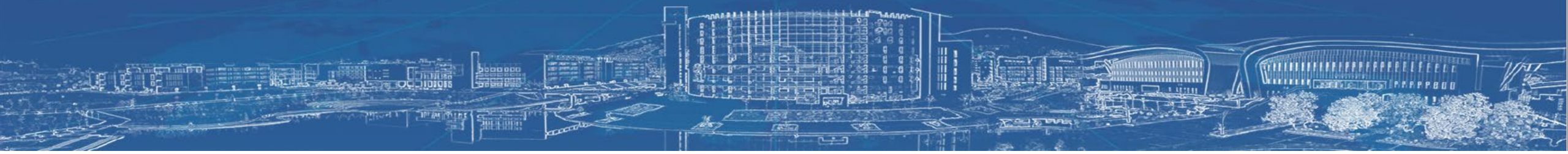
- 学术报告2: Key algorithm of motor control based on verilog
- 报告人: Yassen Vladimirov Gorbounov University of Mining and Geology “St. Ivan Rilski” Bulgaria
- 时间: 9月9日9:00-10:00
- 报告简介: This report aims to explore the key algorithms in Verilog-based motor control. Verilog, as a hardware description language, is widely used in the design and verification of electronic systems, especially in the development of FPGAs (field programmable gate arrays) and ASICs (application specific integrated circuits). In the field of motor control, Verilog is able to accurately describe the control logic and achieve efficient motor control algorithms. This report mainly introduces vector control algorithm, closed loop control algorithm and coordinate transformation algorithm. In addition, it also briefly introduces the matters that need attention in the process of algorithm implementation, including how to improve the execution efficiency and reduce the resource consumption under the premise of ensuring the accuracy of the algorithm.





报告专家简介:

Yassen Vladimirov Gorbounov, 保加利亚索非亚地矿大学采矿机电学院副教授。主要研究方向为电驱动控制、并行算法、可编程逻辑器件(CPLD和FPGA)及其在机电系统控制中的应用。还包括特殊类型的电气驱动器-开关磁阻电机。在机电设备可编程逻辑控制领域著有1本书和1部专著, 在自动控制领域著有1本手册和50多篇出版物。





承办单位：

新能源电动车技术与装备中东欧国家国际联合研究中心

江苏省外国专家工作室

江苏省高校新能源发电与电动车国际合作联合实验室

中国矿业大学电气工程学院

徐州市电动汽车动力系统高价值专利培育示范中心

徐州市新能源电动车技术与装备重点实验室

欢迎全校师生参加！