

University of Rochester
Department of Electrical and Computer Engineering Colloquia Series
ECE Guest Lecturer

5G Wireless: The End of Linear RF Transmitters

Quentin Diduck

Wednesday Sept. 26
12:00-1:00 PM
1400 Wegmans Hall

Dr. Quentin Diduck joined Eridan Communications in 2014 and is currently the Director of Product Development. Dr. Diduck's primary focus is on the commercialization of the MIRACLE^(tm) module transceiver. By using his experience with gallium nitride circuits and CMOS mixed signal design he has been able to provide key technology developments that have enabled transmitters to support both large bandwidth and high efficiency. Prior to joining Eridan Communications, Dr. Diduck worked for Avogy Inc. developing high voltage vertical power transistors using free standing gallium nitride. Additionally he worked for Group4 Labs Inc. developing gallium nitride on diamond substrates and high power RF transistors using that material system. Before joining Group4 Labs, Dr. Diduck was a post-doctoral researcher at Cornell University and worked for Professor Lester Eastman on developing GaN based - ballistic transport devices as well as high frequency RF components. During this time he developed novel fabrication methods for gallium nitride on diamond HEMT devices resulting in unity current gain frequencies in excess of 90 GHz. Currently Dr. Diduck holds ten US patents, several journal publications and over 400 citations. Additionally he has served as a reviewer for multiple conferences and journals. Dr. Diduck completed his B.Sc. degree in

