

## SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING  
COLLEGE OF DESIGN AND ENGINEERING

Website: <https://cde.nus.edu.sg/ece>

**Area: Microwave & Radio Frequency**

**Host: Prof Chen Zhi Ning**

<b>TOPIC</b>	:	<b>Decoupling and Matching Technology</b>
<b>SPEAKER</b>	:	<b>Ms. Xu Zhi Yue Julia</b> Graduate Student, ECE Dept, NUS
<b>DATE</b>	:	<b>Tuesday, 19 April 2022</b>
<b>TIME</b>	:	<b>1.30PM to 2.00PM</b>
<b>WEBINAR</b>	:	<b>Join Zoom Meeting</b> <a href="https://nus-sg.zoom.us/j/85251376635?pwd=azVCQmpqUUY2SXBHWnZLbkxJS1N4Zz09">https://nus-sg.zoom.us/j/85251376635?pwd=azVCQmpqUUY2SXBHWnZLbkxJS1N4Zz09</a> <b>Meeting ID: 852 5137 6635</b> <b>Passcode: 249232</b>

### ABSTRACT

Mutual coupling can cause many negative effects, including signal interruption, system degradation, wrong object detection for radar, etc. Especially, radar systems prefer ultra-high isolation to reduce the range within which another antenna is wrongly detected as a nearby object. And since most radars adopt millimetre wave (mmWave) as their working frequency, mmWave decoupling technology is the primary focus. However, decoupling at such a high frequency faces many challenges. Hence, we sought inspirations from literature review and developed the research. As a result, the mmWave antenna system we developed demonstrates high isolation.

### BIOGRAPHY

Julia Xu is an MEng student in NUS. Her study field is RF & Microwave and research focus is decoupling technology.

<https://cde.nus.edu.sg/ece/highlights/events/>