



## **CITATION FOR DEAN CHAIR'S ASSOCIATE PROFESSOR VINCENT TAN YOUNG RESEARCHER AWARD**

Dean's Chair Associate Professor Vincent Tan is a rising star in information theory. He is known internationally for his works on finite-length fundamental limits which shape the design of low-latency networked communication systems.

One of Vincent's most significant achievements is in establishing an impossibility result for point-to-point communication systems that matches Strassen's achievable result from the 1960s. No communication protocol can improve on this performance bound. Vincent—together with his collaborators—has also derived similarly stunning results for multi-user networks.

In addition, Vincent authored and published a sole-authored research monograph in the *Foundations and Trends® in Communications and Information Theory*. New mathematical theorems constitute by-products of these analyses and are applicable to machine learning tasks such as the estimation of graphs from data.

Vincent publishes extensively in top journals such as the *IEEE Transactions on Information Theory*, *Communications in Mathematical Physics* and the *SIAM Journal on Discrete Mathematics*. Vincent is a Distinguished Lecturer of the IEEE Information Theory Society. He received the MIT EECS thesis prize and was awarded an NRF Fellowship.

This evening, we are proud to present the Young Researcher Award to Associate Professor Vincent Tan. Congratulations!