

# Jordan University of Science and Technology

## On the channel capacity in Rician and Hoyt fading environments with MRC diversity

**Authors:** S. Khatalin, and J. P. Fonseka

**Abstract:** Expressions for the capacity of Rician and Hoyt (Nakagami-q) fading channels with maximal ratio combining diversity are available in the literature in the form of an infinite series. We derive lower and upper bounds on the errors resulting from truncating the infinite series in those capacity expressions. We also present numerical examples for illustration purposes.