Abstract

In this paper, Kalman filtering is used for MIMO-OFDM channel estimation. First we uses the MIMO-OFDM Training sequences, the current channel response at the receiving end, and then use the Kalman filter method to estimate the channel response. The measure and tracking, using the Jakes channel transmission model. Through simulation can be seen, and compared to other channel estimation method proposed in this paper. Method can fast-track the time-varying channel where the channel response changes very quickly. At the same time, without excessive insertion of training sequences and pilot symbols, the performance of more greatly improved.

References

Kalman Filtering based Channel Estimation for MIMO-OFDM


Index Terms

Computer Science Communications

Keywords

MIMO-OFDM Kalman Filtering Jakes Model AR process Channel Estimation