



RECENT ADVANCES IN PARTIAL UPDATE AND SPARSE ADAPTIVE FILTERS (TueAmOR12)

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★ Abstract :

This paper presents an overview of recent advances in partial update and sparse adaptive filters. Following an introduction to the notion of partial updating, several application examples are presented in the areas of echo cancellation, blind equalization and multiuser detection. These examples demonstrate the capability of partial-update algorithms to maintain a performance close to their computationally more demanding full-update counterparts. The paper also discusses recently proposed techniques for sparse system identification, as well as the concept of joint partial and sparse updating for adaptive identification of sparse systems.