

## عنوان مقاله:

Optimum Routing and Scheduling in Wireless Networks

## محل انتشار:

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## خلاصه مقاله:

A joint routing and scheduling algorithm for multihop wireless networks, based on a unified convex optimization framework, is proposed. Our approach is novel in that it integrates optimal scheduling with a modified version of distributed minimum delay routing. Accordingly, the algorithm performs packet routing based on a complete multi-hop view of the network and its traffic conditions. This stands in sharp contrast to joint routing and scheduling algorithms, such as the Tassiulas algorithm that rely on per-session queue differential between adjacent nodes for channel scheduling and packet routing. Simulation results illustrate that the proposed algorithm performs much better than Tassiulas, in terms of packet delay and jitter, packet loss and misordering, and energy consumption. Moreover, in terms of capacity region, simulation results do not reflect any noticeable difference between the two algorithms.

## کلمات کلیدی:

wireless networks, routing, scheduling

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1426640>

