PCC
PERSONAL COMPUTING AND COMMUNICATION

Wireless IP - a new PCC Project

Senior Researchers/main advisors:

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Goal: New efficient and transparent modes of transmission of IP traffic

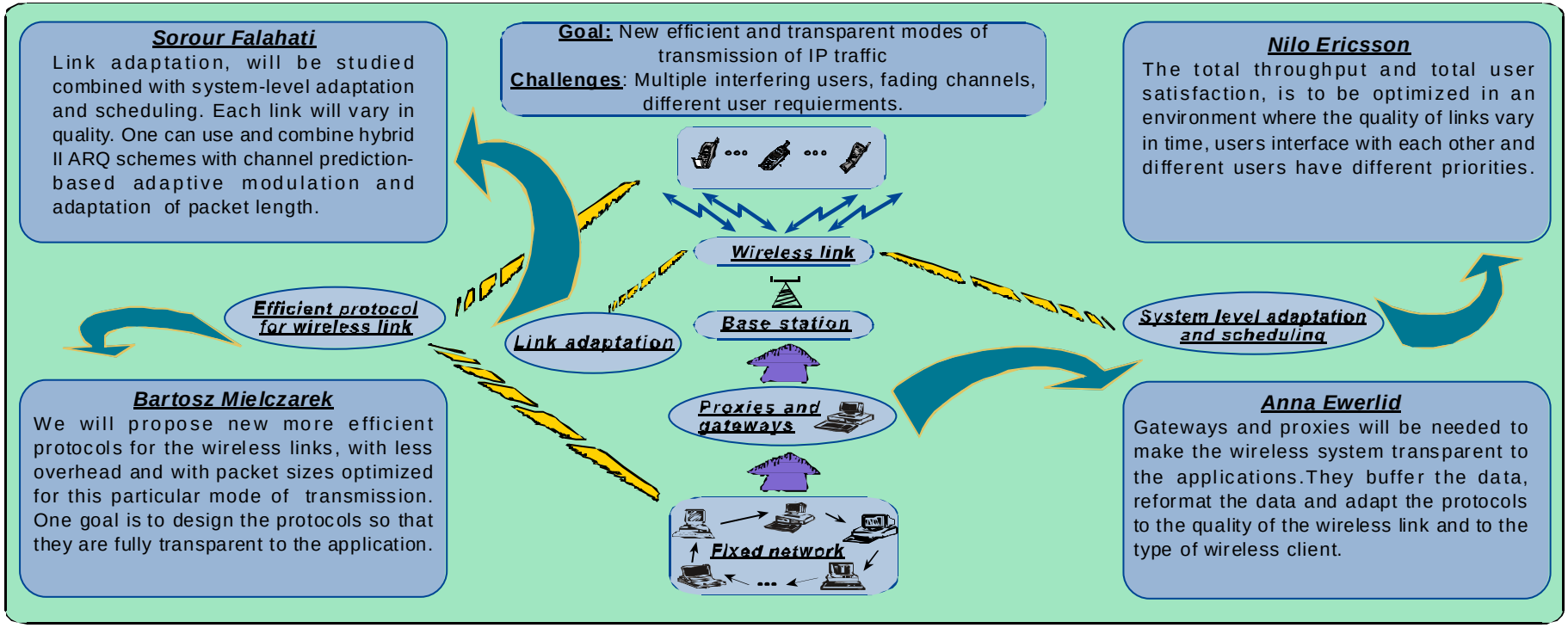
Challenges: Multiple interfering users, fading channels, different user requierments.

Sorour Falahati

Link adaptation, will be studied combined with system-level adaptation and scheduling. Each link will vary in quality. One can use and combine hybrid II ARQ schemes with channel prediction-based adaptive modulation and adaptation of packet length.

Nilo Ericsson

The total throughput and total user satisfaction, is to be optimized in an environment where the quality of links vary in time, users interface with each other and different users have different priorities.



Bartosz Mielczarek

We will propose new more efficient protocols for the wireless links, with less overhead and with packet sizes optimized for this particular mode of transmission. One goal is to design the protocols so that they are fully transparent to the application.

Anna Ewerlid

Gateways and proxies will be needed to make the wireless system transparent to the applications.They buffer the data, reformat the data and adapt the protocols to the quality of the wireless link and to the type of wireless client.