

(1)

6.433/6.435 Recursive Estimation / System Identification 4/1/02

Possible Subjects for Term Papers.

Blind Equalization

Decision Feedback Equalization (Paper by Giuffi-Forney: handed out)

Approximations to Non-linear Filters: Applications to

Frequency Trackers

Partial Rectifications and the Berlekamp-Massey Algorithm

Estimation & Control with Bounded data Uncertainties

(Paper by Sayed, Nascimento, Chandrasekaran: see References in book)

State Space Approach to Adaptive RLS Filtering

(Paper by Kailath - Sayed: handed out).

Vector Levinson Durbin Algorithm & its Properties

Phase-locked loops: Non-linear Filtering View

Non-parametric Regression: Applications to

Systems Identification.

Scattering Theory Approach to Estimation (Ch. 17 of book)

with Applications

~~Introduction~~ MDL Principle with Applications to

Systems Identification.

(2)

Decoding Reed-Solomon and BCH Codes

Stochastic Realization Theory and Applications

Mixture Kalman Filters (Paper of R. Chen & J. Liu

to appear in J. Royal Stat. Soc., Ser B.

Single-User and Multi-User Detection.