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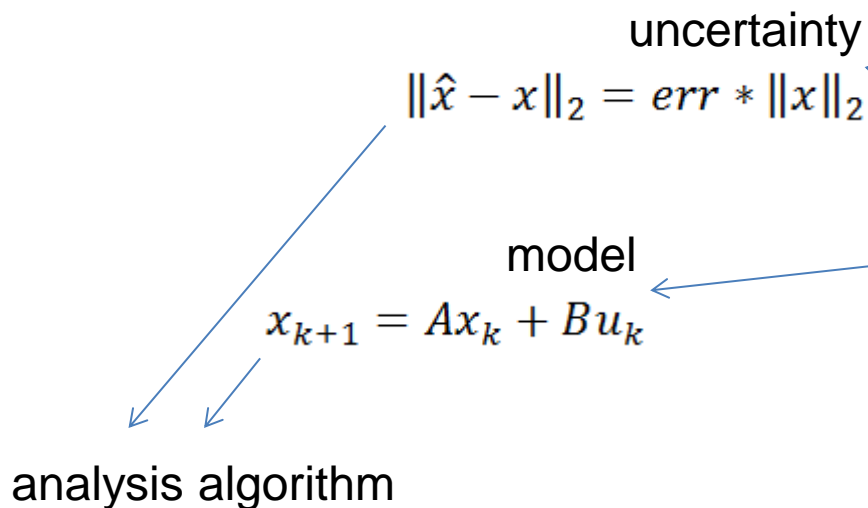
Research interests

- ground coupled heat pump systems
- model predictive control
- robustness analysis

Background

Control systems

Technical University of Sofia, Bulgaria



```

% Pz matrix with Objective function decrease
% eps = 1e-5;
eps = adpvar(1,1);
Pza = I_x_hat'*blkdiag(Hs(Np),zeros(m))*I_x_hat ...
- Ma ...
- I_x'*blkdiag([A B], eye(Np*m))*Hs(Np)*blkdiag([A
- blkdiag(zeros(n), eps*eye(n), zeros((Np+1)*m)));
Pzb = [Hs(Np) zeros(1,m)]*I_x_hat ...
- Mb ...
- Hs(Np)*blkdiag([A B], eye(Np*m))*I_x;
Pzc = 0; % The two 'c'-terms cancel each other
Pz = [Pza 0.5*Pzb'; 0.5*Pzb Pzc];

```

Robust?

