

Convergence
Approximation & error

Our Society

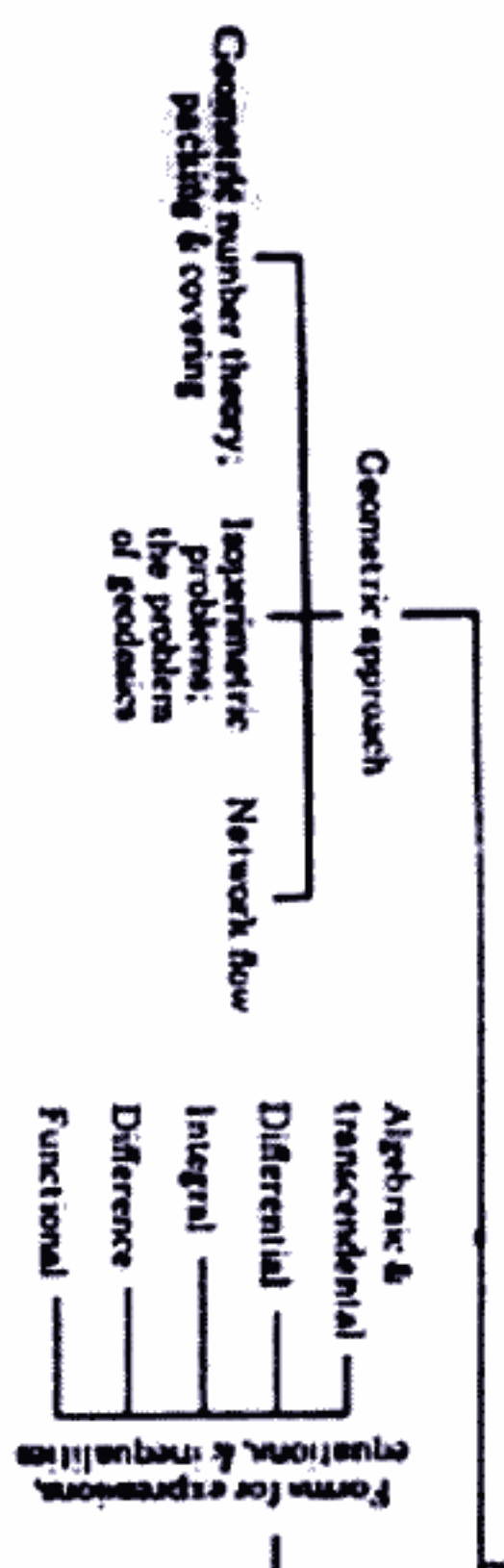
Optimization

Games and Equilibria

(subgame perfect)

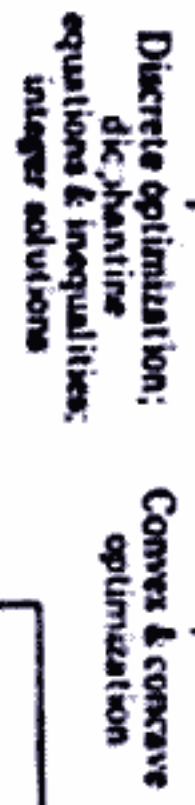
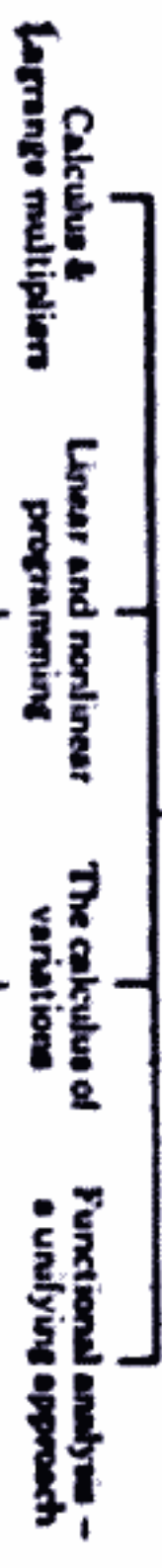
Deterministic & probabilistic

Algebraic approach



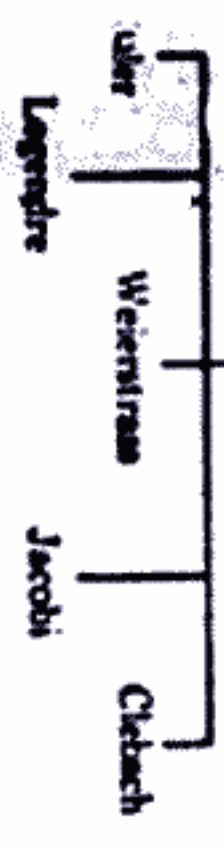
Single stage

Constant coefficients

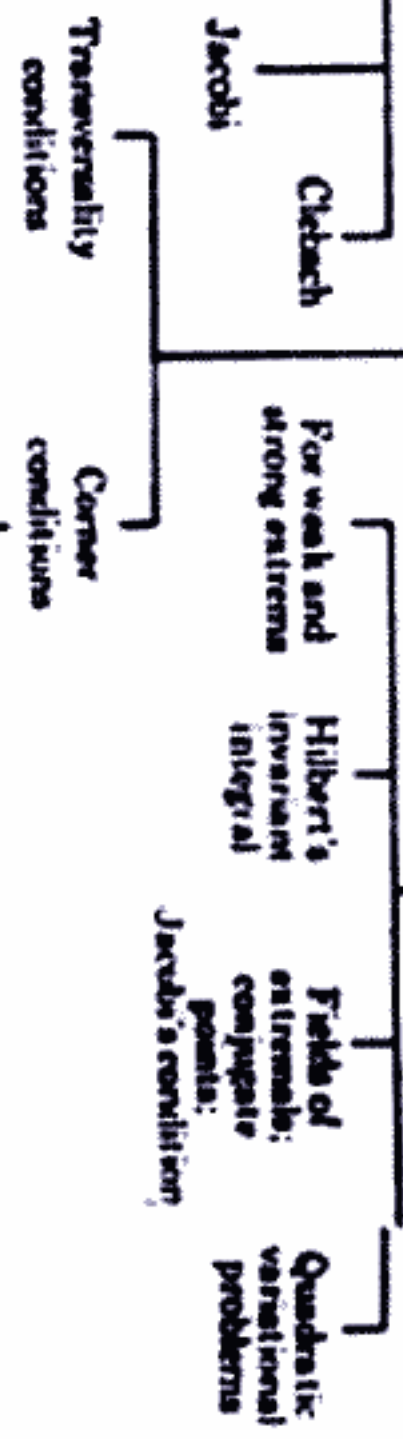


Functionals: variations - the problem of Bolza

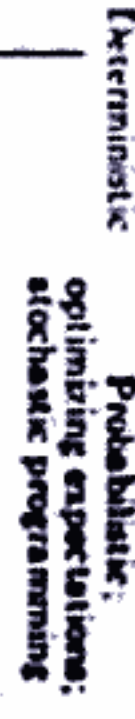
Necessary conditions



Sufficiency conditions

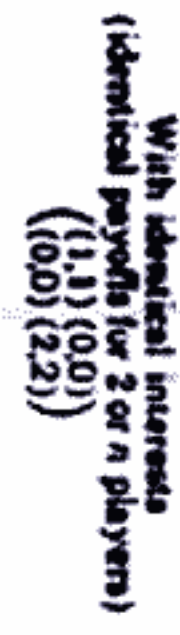


Applications



Multi-stage

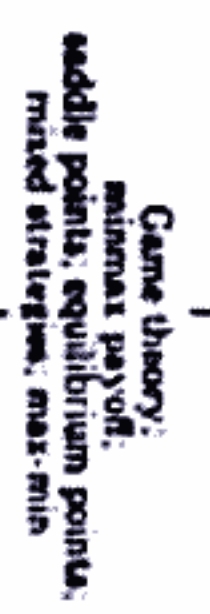
Dynamic programming



Noncooperative (2- and n-person) games (no enforcement!)



Multiple interests



Complete and incomplete information

With opposite interests: 2-person constant sum (e.g., zero sum!)

Nontransferable utility

Harsanyi value