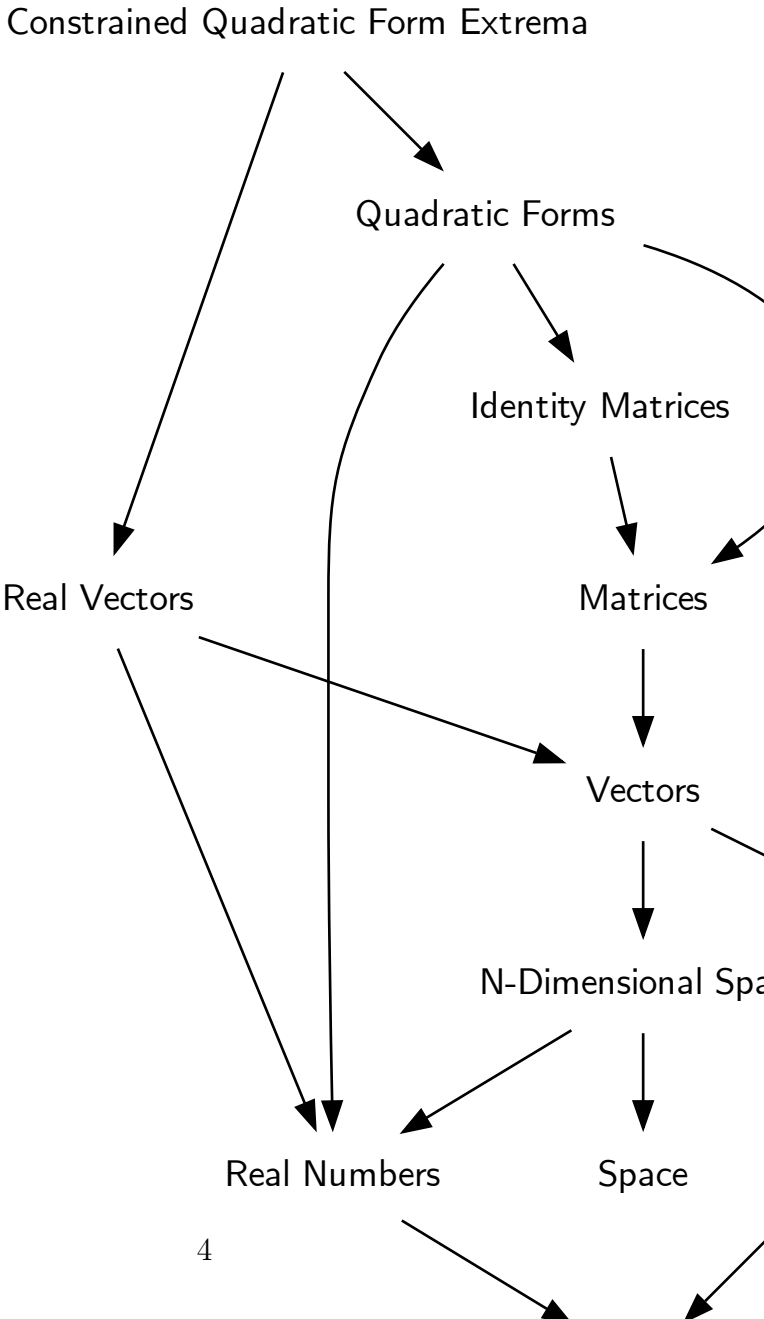
Constrained Quadratic Form Extrema

1 Why

Eigenvalues

2 Result

Proposition 1. *A necessary condition for a maximizer of* $x^T Ax$ *subject to* $x \in \mathbf{R}^n$ *and* $x^T x = 1$ *is that* $Ax = \lambda x$ *where* λ *is the Lagrange multiplier... TODO: lagrange multiplier, gradient, quadratic form, necessary conditions, etc.*


Constrained Quadratic Form Extrema
Quadratic Forms
Identity Matrices
Real Vectors
Matrices
Vectors
N-Dimensional Spa
Real Numbers
Space