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Nota di contenuto	2.2 Lyapunov-Krasovskii functionals 2.2.1 Structure of Lyapunov-Krasovskii quadratic functionals; 2.2.2 Elementary functionals and their properties; 2.2.3 Total derivative of functionals with respect to systems with delays; 2.3 Positiveness of functionals; 2.3.1 Definitions; 2.3.2 Sufficient conditions of positiveness; 2.3.3 Positiveness of functionals; 2.4 Stability via Lyapunov-Krasovskii functionals; 2.4.1 Stability conditions in the norm $\  \cdot \ _H$ ; 2.4.2 Stability conditions in the norm $\  \cdot \ $ ; 2.4.3 Converse theorem; 2.4.4 Examples; 2.5 Coefficient conditions of stability 2.5.1 Linear system with discrete delay 2.5.2 Linear system with distributed delays; 3 Linear quadratic control; 3.1 Introduction; 3.2 Statement of the problem; 3.3 Explicit solutions of generalized Riccati equations; 3.3.1 Variant 1; 3.3.2 Variant 2; 3.3.3 Variant 3; 3.4 Solution of Exponential Matrix Equation; 3.4.1 Stationary solution method; 3.4.2 Gradient methods; 3.5 Design procedure; 3.5.1 Variants 1 and 2; 3.5.2 Variant 3; 3.6 Design case studies; 3.6.1 Example 1; 3.6.2 Example 2; 3.6.3 Example 3; 3.6.4 Example 4; 3.6.5 Example 5: Wind tunnel model

3.6.6 Example 6: Combustion stability in liquid propellant rocket motors  
4 Numerical methods; 4.1 Introduction; 4.2 Elementary one-step methods; 4.2.1 Euler's method; 4.2.2 Implicit methods (extrapolation); 4.2.3 Improved Euler's method; 4.2.4 Runge-Kutta-like methods; 4.3 Interpolation and extrapolation of the model pre-history; 4.3.1 Interpolational operators; 4.3.2 Extrapolational operators; 4.3.3 Interpolation-Extrapolation operator; 4.4 Explicit Runge-Kutta-like methods; 4.5 Approximation orders of ERK-like methods; 4.6 Automatic step size control; 4.6.1 Richardson extrapolation  
4.6.2 Automatic step size control

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