

2008 *Journal of Guidance, Control, and Dynamics* Index

How to Use the Index

In the Subject Index, pages 1839–1845, each technical paper is listed under a maximum of three appropriate headings. Note the locating number in boldface type preceding each paper title, and use that number to find the paper in the Chronological Index. The Author Index, pages 1846–1847, lists all authors associated with a given technical paper. The locating numbers are identical to those in the Subject Index. The Chronological Index, pages 1848–1853, also lists all papers by their locating numbers. This listing contains titles, authors and their affiliations, and volume, issue number, and page where the paper appeared. It also gives the AIAA paper number, if any, on which the article was based. Comments, Replies, and Errata are listed directly beneath the paper to which they refer. If the paper to which they refer was published prior to 2008, that paper also will appear in both the Subject and Chronological Indexes. Authors of Comments also are listed in the Author Index.

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G08-140 Indirect Robust Adaptive Fault-Tolerant Control for Attitude Tracking of Spacecraft
G08-023 Averaged Relative Motion and Applications to Formation Flight Near Perturbed Orbits
G08-008 Minimum-Fuel Deployment for Spacecraft Formations via Optimal Control
G08-041 Unit Quaternion from Rotation Matrix
G08-138 Propellant-Free Control of Tethered Formation Flight, Part 2: Nonlinear Under-actuated Control
G08-163 Rendezvous Maneuvers of Multiple Spacecraft Using Differential Drag Under J_2 Perturbation
G08-182 Constrained Slews for Single-Axis Pointing

State Estimation

G08-081 Nonlinear Geometric Estimation for Satellite Attitude
G08-092 Euclidean Calculation of Feature Points of a Rotating Satellite: A Daisy-Chaining Approach
G08-176 Kalman Filter for Spinning Spacecraft Attitude Estimation
G08-056 Vision-Based Target Geolocation Using Micro Air Vehicles
G08-078 Carrier-Phase Differential Global Positioning System Navigation Filter for High-Altitude Spacecraft

G08-021 Gyroless Attitude Control of Multibody Satellites Using an Unscented Kalman Filter
G08-019 Efficient Nonlinear Actuator Fault Detection and Isolation System for Unmanned Aerial Vehicles
G08-001 Distributed Multitarget Tracking and Identity Management
G08-169 Asymptotic Behavior of the Estimation Error Covariance of Quaternion Estimators
G08-009 Asymptotically Optimal Attitude Filtering with Guaranteed Convergence
G08-146 New State Update Equation for the Unscented Kalman Filter
G08-181 Mars Aerobraking Spacecraft State Estimation by Processing Inertial Measurement Unit Data
G08-165 Uncertainty Propagation for Nonlinear Dynamic Systems Using Gaussian Mixture Models

Structural Control

G08-040 Dynamics of a Flexible Space Tether Equipped with a Crawler Mass
G08-038 Transmission Zeros in Structural Control with Collocated Multi-Input/Multi-Output Pairs
G08-045 Deflection-Limiting Commands for Systems with Velocity Limits
G08-035 Structural Dynamics of Spin-Stabilized Solar Sails with Applications to UltraSail

System Identification

G08-097 Modeling Human Multichannel Perception and Control Using Linear Time-Invariant Models
G08-084 Fault-Tolerant Subspace Predictive Control Applied to a Boeing 747 Model
G08-028 Model Reduction of Input-Output Dynamical Systems by Proper Orthogonal Decomposition
G08-170 Novel Nonlinear Hammerstein Model Identification: Application to Nonlinear Aeroelastic/Aeroservoelastic System
G08-177 On-Orbit Identification of Inertia Properties of Spacecraft Using a Robotic Arm
G08-019 Efficient Nonlinear Actuator Fault Detection and Isolation System for Unmanned Aerial Vehicles

Trajectory Optimization

G08-168 Rapid Optimal Multiburn Ascent Planning and Guidance
G08-173 Optimal and Feedback Path Planning for Cooperative Attack
G08-103 Optimal Trajectory Regulation for Radar Imaging Guidance
G08-129 Constructive Methods for Initialization and Handling Mixed State-Input Constraints in Optimal Control
G08-135 Linear Quadratic Guidance Laws for Imposing a Terminal Intercept Angle
G08-077 Nonlinear Control and Estimation of a Tethered Kite in Changing Wind Conditions
G08-066 Indirect Optimization of Two-Dimensional Finite Burning Interplanetary Transfers Including Spiral Dynamics
G08-062 Automated Generation of Realistic Near-Optimal Aircraft Trajectories
G08-131 Analytical Solution of Optimal Feedback Control for Radially Accelerated Orbits
G08-087 Infinite-Horizon Control for Retrieving a Tethered Subsatellite via an Elastic Tether

G08-132 Unmanned Aerial Vehicles Cooperative Tracking of Moving Ground Target in Urban Environments
G08-044 Spectral Algorithm for Pseudospectral Methods in Optimal Control
G08-083 Optimal Impact Strategies for Asteroid Deflection
G08-079 Optimization of Perching Maneuvers Through Vehicle Morphing
G08-065 Optimal Lunar Launch Trajectories to Sun-Earth L_1 Vicinity
G08-051 Multiple Method 2-D Trajectory Optimization Satisfying Waypoints and No-Fly Zone Constraints
G08-063 Optimal Reconfiguration of Spacecraft Formations Using the Gauss Pseudospectral Method
G08-036 General Method for Optimal Guidance of Spacecraft Formations
G08-142 Safe Trajectories for Autonomous Rendezvous of Spacecraft
G08-008 Minimum-Fuel Deployment for Spacecraft Formations via Optimal Control
G08-137 Trajectory Optimization Using Multi-resolution Techniques
G08-145 Minimizing Mission Risk in Fuel-Constrained Unmanned Aerial Vehicle Path Planning
G08-039 Comparison of Global and Local Collocation Methods for Optimal Control
G08-023 Averaged Relative Motion and Applications to Formation Flight Near Perturbed Orbits
G08-006 Optimal Crosswind Towing and Power Generation with Tethered Kites
G08-175 Framework for Low-Observable Trajectory Generation in Presence of Multiple Radars
G08-143 Initial Lagrange Multipliers for the Shooting Method
G08-139 Guidance Algorithm for Range Maximization and Time-of-Flight Control of a Guided Projectile
G08-186 Multi-Objective Optimization of Perturbed Impulsive Rendezvous Trajectories Using Physical Programming
G08-152 Trajectory-Shaping Guidance for Interception of Ballistic Missiles During the Boost Phase
G08-144 Convergence of the Costates Does Not Imply Convergence of the Control
G08-161 Flight Testing a Real-Time Direct Collocation Path Planner

UAVs

G08-026 Coordinated Standoff Tracking of Moving Targets Using Lyapunov Guidance Vector Fields
G08-104 Structured H-Infinity Command and Control-Loop Design for Unmanned Helicopters
G08-019 Efficient Nonlinear Actuator Fault Detection and Isolation System for Unmanned Aerial Vehicles
G08-099 Sensitivity of Cooperative Target Geolocalization to Orbit Coordination
G08-132 Unmanned Aerial Vehicles Cooperative Tracking of Moving Ground Target in Urban Environments
G08-175 Framework for Low-Observable Trajectory Generation in Presence of Multiple Radars
G08-145 Minimizing Mission Risk in Fuel-Constrained Unmanned Aerial Vehicle Path Planning

G08-088 Vision-Based Tracking and Motion Estimation for Moving Targets Using Unmanned Air Vehicles
G08-118 Lyapunov Vector Fields for Autonomous Unmanned Aircraft Flight Control
G08-109 Fuel-Efficient Formation Flight-Control Design Based on Energy Maneuverability
G08-094 Decentralized Cooperative-Control Design for Multivehicle Formations
G08-161 Flight Testing a Real-Time Direct Collocation Path Planner
G08-187 Proportional Navigation with Adaptive Terminal Guidance for Aircraft Rendezvous
G08-005 Visual Tracking of a Maneuvering Target

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G08-057 Multicommodity Eulerian-Lagrangian Large-Capacity Cell Transmission Model for En Route Traffic

Analytical and Numerical Methods

G08-070 Optimal Attitude Matrix from Two Vector Measurements
G08-131 Analytical Solution of Optimal Feedback Control for Radially Accelerated Orbits
G08-100 Adaptive Gravitational Force Representation for Fast Trajectory Propagation Near Small Bodies
G08-014 Simplified Equations for Computing Science Orbits Around Planetary Satellites
G08-041 Unit Quaternion from Rotation Matrix
G08-082 Analysis of Wing Rock Due to Rolling Moment Hysteresis
G08-146 New State Update Equation for the Unscented Kalman Filter
G08-127 Two-Timescale Discretization Scheme for Collocation
G08-126 Six-Degree-of-Freedom Trajectory Optimization Using a Two-Timescale Collocation Architecture

Environmental Effects

G08-061 Prediction of Icing Effects on the Coupled Dynamic Response of Light Airplanes

Human Factors

G08-097 Modeling Human Multichannel Perception and Control Using Linear Time-Invariant Models
G08-164 Effects of Peripheral Visual and Physical Motion Cues in Roll-Axis Tracking Tasks

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G08-011 Development of an Active Fault-Tolerant Flight Control Strategy

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Launch Vehicle and Sounding Rocket Systems

G08-050 Attitude Estimation for Sounding Rockets Using Microelectromechanical System Gyros

Trajectories and Tracking Systems

G08-105 Low-Thrust Nonlinear Guidance by Tracking Mean Orbital Elements

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Advanced Space Propulsion

G08-163 Rendezvous Maneuvers of Multiple Spacecraft Using Differential Drag Under J_2 Perturbation
G08-074 Analysis of Displaced Solar Sail Orbits with Passive Control

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Robotic Systems

G08-144 Convergence of the Costates Does Not Imply Convergence of the Control
G08-002 On-Orbit Assembly Using Superquadric Potential Fields

Unmanned Systems

G08-077 Nonlinear Control and Estimation of a Tethered Kite in Changing Wind Conditions
G08-002 On-Orbit Assembly Using Superquadric Potential Fields
G08-027 Optimal Feedback Control: Foundations, Examples, and Experimental Results for a New Approach

SPACE TECHNOLOGY

Aerobraking Flight Mechanics

G08-181 Mars Aerobraking Spacecraft State Estimation by Processing Inertial Measurement Unit Data
G08-117 Skip Entry Trajectory Planning and Guidance

Global Positioning System

G08-078 Carrier-Phase Differential Global Positioning System Navigation Filter for High-Altitude Spacecraft

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G08-091 Structured Adaptive Model Inversion Controller for Mars Atmospheric Flight

Mission Design and Analysis

G08-083 Optimal Impact Strategies for Asteroid Deflection
G08-067 Interplanetary Periodic Trajectories in Two-Planet Systems
G08-036 General Method for Optimal Guidance of Spacecraft Formations
G08-063 Optimal Reconfiguration of Spacecraft Formations Using the Gauss Pseudospectral Method
G08-150 Examining Groundtrack Geometry Transitions by Evaluating the Number of Longitude-Rate Zeros
G08-108 Fuel-Efficient Interferometric Imaging Maneuvers in Near-Earth Orbit
G08-014 Simplified Equations for Computing Science Orbits Around Planetary Satellites

Mission Trajectories (Earth and Interplanetary)

G08-065 Optimal Lunar Launch Trajectories to Sun-Earth L_1 Vicinity
G08-063 Optimal Reconfiguration of Spacecraft Formations Using the Gauss Pseudospectral Method
G08-108 Fuel-Efficient Interferometric Imaging Maneuvers in Near-Earth Orbit
G08-067 Interplanetary Periodic Trajectories in Two-Planet Systems

G08-036 General Method for Optimal Guidance of Spacecraft Formations

Space Experiments

G08-172 Determination of Spherical Test Mass Kinematics with Modular Gravitational Reference Sensor

Space Systems

G08-136 Dynamics and Control of Gravity Tractor Spacecraft for Asteroid Deflection

G08-108 Fuel-Efficient Interferometric Imaging Maneuvers in Near-Earth Orbit

G08-123 Optimal Fuel-Balanced Impulsive Formationkeeping for Perturbed Spacecraft Orbits

Spacecraft Attitude Determination

G08-176 Kalman Filter for Spinning Spacecraft Attitude Estimation

G08-116 Two-Sun-Cones Attitude-Determination Method

G08-169 Asymptotic Behavior of the Estimation Error Covariance of Quaternion Estimators

G08-009 Asymptotically Optimal Attitude Filtering with Guaranteed Convergence

G08-050 Attitude Estimation for Sounding Rockets Using Microelectromechanical System Gyros

Spacecraft Structural Configuration, Design, and Analysis

G08-002 On-Orbit Assembly Using Superquadric Potential Fields

STRUCTURAL MECHANICS AND MATERIALS

Aeroelasticity and Control

G08-166 Control-Oriented Flutter/Limit-Cycle-Oscillation Prediction Framework

Dynamic Model Analysis

G08-072 Parametric Study of Spherical Rovers Crossing a Valley

Flexible and Active Structures

G08-045 Deflection-Limiting Commands for Systems with Velocity Limits

G08-047 Measuring and Modeling the Dynamics of Stiffened Thin-Film Polyimide Panels

G08-096 Direct Verification of Parametric Solution for Vibration Reduction Control Problems

G08-038 Transmission Zeros in Structural Control with Collocated Multi-Input/Multi-Output Pairs

Structural Dynamics and Characterization

G08-148 Lagrangian View of the Work-Rate Theorem

G08-047 Measuring and Modeling the Dynamics of Stiffened Thin-Film Polyimide Panels