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- Gough-Stewart platform spatio-geom. impedance control. *Fasse, E.D., +, T-RA Apr 99* 281-288

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- mobile robot, autonomous, localization, adaptive EKF appl. *Jetto, L., +, T-RA Apr 99* 219-229

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- autonomous mobile robots, limited visibility, distributed memoryless point convergence algm. *Ando, H., +, T-RA Oct 99* 818-828

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- ant-robots distributed covering by evaporating traces. *Wagner, I.A., +, T-RA Oct 99* 918-933

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- flexible link robot arm, adaptive nonlin. boundary control. *de Queiroz, M.S., +, T-RA Aug 99* 779-787

**Distributed processing; cf.** Distributed algorithms; Parallel processing**Duality (mathematics)**

- job-shop scheduling with uncertain proc. requirements. *Luh, P.B., +, T-RA Apr 99* 328-339

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- 2-machine FMS scheduling, pseudopolynomial dyn. prog. *Cheng, T.C.E., +, T-RA Feb 99* 187-190

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**Dynamic response; cf.** Transient response**Dynamics; cf.** Friction; Impact (mechanical); Robot dynamics**E****Elasticity**

- planar elastic manipulator under gravity, path planning. *Kumar Sarkar, P., +, T-RA Apr 99* 357-362

**Electric impedance; cf.** Impedance matrix**Electronic equipment manufacture; cf.** Printed circuit manufacture**Energy storage; cf.** Mechanical energy storage**Engineering; cf.** Design engineering; Maintenance engineering**Engineering computing; cf.** Aerospace computing**Equations; cf.** Differential equations**Error compensation**

- planar elastic manipulator under gravity, path planning. *Kumar Sarkar, P., +, T-RA Apr 99* 357-362

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- LANA, lane extraction algm. for vehicle visual navig. *Kreucher, C., +, T-RA Apr 99* 343-350

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- excavator arm inertial/friction param. ident. *Tafazoli, S., +, T-RA Oct 99* 966-971

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- virtual reality in robotics and automation (special section). *T-RA Jun 99* 397-487

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- real-time failure-tolerant control of kinematically redundant manipulators. *Groom, K.N., +, T-RA Dec 99* 1109-1116

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- indoor mobile robot localization, intens./range images fusion. *Neira, J., +, T-RA Feb 99* 76-84

- LANA, lane extraction algm. for vehicle visual navig. *Kreucher, C., +, T-RA Apr 99* 343-350

- mech. parts, feature-based reverse engng. *Thompson, W.B., +, T-RA Feb 99* 57-66

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- excavator arm inertial/friction param. ident. *Tafazoli, S., +, T-RA Oct 99* 966-971

- force guided robot assembly, perturb./correl. method. *Sooyong Lee, +, T-RA Aug 99* 764-773

- human body movement meas., immersive eval. *Molet, T., +, T-RA Jun 99* 475-485

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- multi-manipulators with pass. joints cooperation control. *Yun-Hui Liu, +, T-RA Apr 99* 258-267

- planar space robots time-invariant config. control. *Mukherjee, R., +, T-RA Apr 99* 268-280

- wheeled nonholonomic robots, sliding mode path tracking. *Jong-Min Yang, +, T-RA Jun 99* 578-587

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- planar elastic manipulator under gravity, path planning. *Kumar Sarkar, P., +, T-RA Apr 99* 357-362

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- efficient learning of variable-resoln. cognitive maps for autonomous indoor navigation. *Arleo, A., +, T-RA Dec 99* 990-1000

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- mobile robot, autonomous, localization, adaptive EKF appl. *Jetto, L., +, T-RA Apr 99* 219-229

- mobile robot, nonholonomic, vision guided navig. *Yi Ma, +, T-RA Jun 99* 521-536

**Filters; cf.** Kalman filters; Nonlinear filters; Tracking filters**Finance; cf.** Corporate modeling; Costing**Flexible manipulators**

- 2D flexible manipulator, design for nearly posn. independent natural freq. *Everett, L.J., +, T-RA Aug 99* 605-611

- flexible link robot arm, adaptive nonlin. boundary control. *de Queiroz, M.S., +, T-RA Aug 99* 779-787

- flexible manipulator, planar 2-link, friction ident. *Mingli Bai, +, T-RA Apr 99* 362-369

- manipulators, flexible-link, nonlin. adaptive control. *de Queiroz, M.S., +, T-RA Apr 99* 392

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- react. null-space control of flexible struct. mounted manipulator systs. *Nenchev, D.N., +, T-RA Dec 99* 1011-1023

- single-link flexible arms payload adaptive control. *Feliu, J.J., +, T-RA Oct 99* 793-804

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- 2-machine FMS scheduling, pseudopolynomial dyn. prog. *Cheng, T.C.E., +, T-RA Feb 99* 187-190

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- stable haptic interact. with virtual environs. *Adams, R.J., +, T-RA Jun 99* 465-474
  - virtual reality-robotic technols. integrat. *Burdea, G.C., T-RA Jun 99* 400-410
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- force guided robot assembly, perturb./correl. method. *Soojong Lee, +, T-RA Aug 99* 764-773
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- Functions; cf.** Describing functions; Transfer functions
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- land vehicles, inertial meas. unit/GPS navig. loop. *Sukkarieh, S., +, T-RA Jun 99* 572-578

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- variable footprint mechanism for holonomic omnidirectional vehicles and its application to wheelchairs. *Wada, M., +, T-RA Dec 99* 978-989

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- low-latency adaptive vision, VLSI sorting image sens. *Brajovic, V., +, T-RA Feb 99* 67-75

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- barn owl orienting behavior adaptation model, autonomous robotic systs. appl. *Rucci, M., +, T-RA Feb 99* 96-110
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- Mechanoception**
- barn owl orienting behavior adaptation model, autonomous robotic systs. *appl. Rucci, M., +, T-RA Feb 99* 96-110
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- Multiprocessing systems; cf.** Shared memory systems
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- Sensors**  
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- Sensors; cf.** Force sensors; Gas sensors; Image sensors; Optical sensors
- Sequences; cf.** Image sequences
- Sequential switching**  
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- Servomechanisms**  
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- Shared memory systems**  
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- Signal processing; cf.** Acoustic signal processing; Adaptive signal processing; Sensor fusion
- Simulation; cf.** Digital simulation
- Software packages**  
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- Software prototyping**  
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- Solid modeling**  
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- Somatosensory phenomena; cf.** Mechanception
- Sonar**  
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- Sorting**  
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- Spatial reasoning**  
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- Spatial variables control; cf.** Displacement control; Motion control; Position control
- Spatial variables measurement**  
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- Spatial variables measurement; cf.** Attitude measurement; Distance measurement; Position measurement
- Special issues and sections**  
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- Stability**  
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- Stability; cf.** Absolute stability; Asymptotic stability; Lyapunov methods; Mechanical stability; Robust control
- Stability criteria**  
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- Stability criteria; cf.** Popov criterion
- State estimation; cf.** Observers
- Statistical analysis**  
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- Statistical analysis; cf.** Maximum likelihood estimation
- Statistics; cf.** Monte Carlo methods; Statistical analysis
- Stereo image processing**  
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- Stochastic processes**  
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- Stochastic programming**  
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- Suboptimal control**  
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- Surgery**  
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- Switching; cf.** Sequential switching
- Symmetry**  
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- Systems analysis; cf.** Software prototyping
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- Technological forecasting**  
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- Telecontrol; cf.** Telerobotics
- Telerobotics**  
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- Three-term control**  
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- Time-varying systems**  
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- Tolerance analysis**  
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- Tools; cf.** Machine tools
- Topology; cf.** Graph theory
- Torque control**  
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- Tracking**  
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**Tribology; cf.** Friction; Mechanical contact

#### Tuning

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#### Ultrasonic transducers

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#### Uncertain systems

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#### Underwater vehicles

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#### Variable structure systems

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#### Vehicles

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#### Velocity control

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#### Virtual reality

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#### Virtual reality; cf.

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#### VLSI

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#### Wheelchairs; cf.

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