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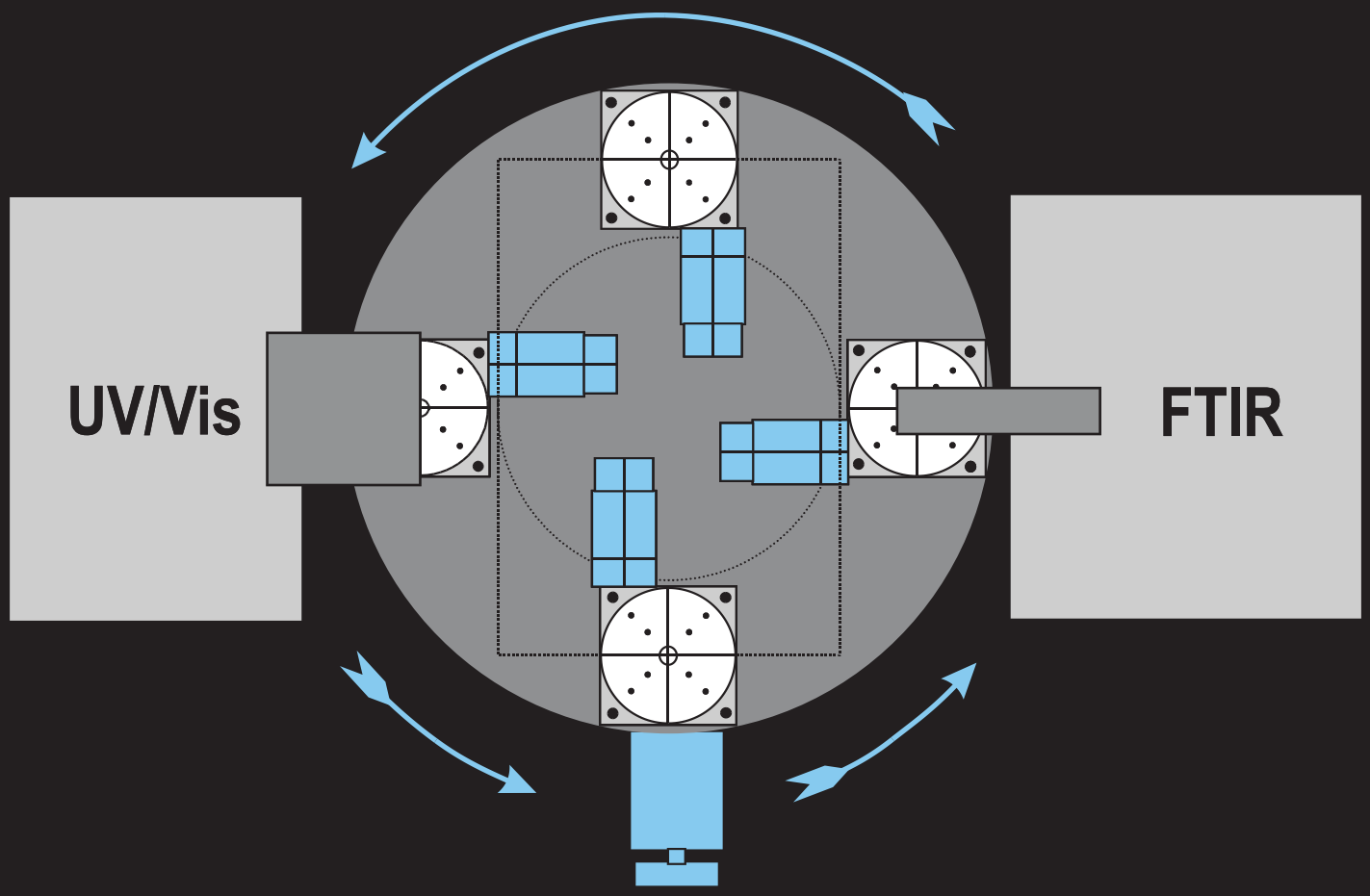

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National Institute of Standards and Technology
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- Computer Security
- Information Access
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- Software Diagnostics and Conformance Testing
- Statistical Engineering

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[1]At Boulder, CO 80303
[2]Some elements at Boulder, CO

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Cover: The diagram on the cover is a schematic depiction of a four-axis position system that is part of a high-throughput system designed to work with the NIST SPHERE. For further information see the paper by C. C. White et al. on page 465 of this issue. Cover art arranged by C. Carey.

The *Journal of Research of the National Institute of Standards and Technology*, the flagship periodic publication of the national metrology institute of the United States, features advances in metrology and related fields of physical science, engineering, applied mathematics, statistics, biotechnology, and information technology that reflect the scientific and technical programs of the Institute. The *Journal* publishes papers on instrumentation for making accurate measurements, mathematical models of physical phenomena, including computational models, critical data, calibration techniques, well-characterized reference materials, and quality assurance programs that report the results of current NIST work in these areas. Occasionally, a Special Issue of the *Journal* is devoted to papers on a single topic. Also appearing on occasion are review articles and reports on conferences and workshops sponsored in whole or in part by NIST.

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