

28 July (Tuesday)

09.40 – 10.20

Plenary Lecture

Room A2

chair: Eva Vamos

Paolo Brenni

The Cumbersome Material Heritage of Astronomy

29 July (Wednesday)

15.00-17.00

S14

THE COMMERCE OF SCIENCE

Room A15

Session I.: Owning and Selling Instruments

chair: Harold Cook

Suzanne Karr Schmidt

Georg Hartmann and the Beginnings of the Printed Scientific Instruments Trade

Stephen A. Johnston

Trading Up: Instruments and Architecture in Early-Modern England

30 July (Thursday)

09.00-13.30

Technical Visits

(organized by Congress)

15.00-17.00

T35

SCIENTIFIC INSTRUMENTS: NEW METHODS FOR STUDYING THEM

Room A2

chair: Vasily Borisov

Maas, Ad

The Unilever collection and the dilemma's of collecting modern scientific instruments

Moiseeva, Tatiana M.

The Project "EPMOSPHERE": The Old French Armillary Sphere of Lomonosov Museum as the Object of the International Education, Restoration, Research

Delikanlis, Panagiotis N

Gnomon: A mediating instrument for drawing, through historical origin, morfological construction and use

Vallmitjana, Santiago and Carme Ferran

Wavefront sensing. A non contact technique for the assessment of optical instruments

15.00-17.00

S33
Room A15

HOW INSTRUMENTS CHANGE HANDS

chair: Alison Morrison-Low

Korey, Michael B.

'Distinguished and well-known to princes and lords':
the self-marketing of early-modern instrument-makers
in Germany

Baker, Alexi

Symbiosis and style: the production, sale and
purchase of instruments in the luxury markets of early
eighteenth century London

Schechner, Sara J.

Counterfeits, Copycats, and Knockoffs in the Branding
and Selling of Scientific Instruments

Kremer, Richard

Selling Surveying Instruments in America Before the
Printed Trade Catalog

17.30-19.30

S33
Room A15

HOW INSTRUMENTS CHANGE HANDS

chair: Sara J. Schechner

Morrison-Low, Alison D.

The Gentle Art of Persuasion: Advertising Instruments
during Britain's Industrial Revolution

Nall, Joshua & Liba Taub

Selling by the book: scientific trade literature

Kidwell, Peggy A.

Mathematical Instruments Changing Hands at World's
Fairs, 1851-1904

Brenni, Paolo

The economics of instruments: prices in Europe
between 1800 and 1914

17.30-19.30

T35
Room A2

SCIENTIFIC INSTRUMENTS: PRECISION MEASUREMENTS, PHYSICS, AND THE MODERN WORLD

chair: Steven Turner

Tapdrup, Jan

An apparatus for demonstrating the imperishability of
forces of nature

Mark, Harry H.

How the interferometer changed ideas about nature

Hashimoto, Takehiko

Controversy over the Reliability of Wind Tunnels in
Early British Aeronautical Research

Reid, John S. and

The Taly Range – an Introduction to a Remarkable

Michael A. Player

Family of Instruments of Precision Measurement

31 July (Friday)

11.30-13.30

T35 SCIENTIFIC INSTRUMENTS: ASTRONOMICAL & GEOGRAPHICAL INSTRUMENTS IN SOCIAL CONTEXT
Room A2 *chair: Stephen Johnston*
Ackermann, Silke Canterbury Tales: Medieval Instruments in Social Context
Taylor, Katie Geography, Astronomy and Mathematical Instruments in 16th-century Europe
Hooijmaijers, Hans The planetarium by Hartog van Laun

15.00-17.00

T35 SCIENTIFIC INSTRUMENTS: TELESCOPES
Room A2 *chair: Paolo Brenni*
Bolt, Marvin Telescopes as Decorative Art
Dunn, Richard Scoping longitude: optical designs for navigation at sea
Caplan, James Astronomical Instruments for Gazing and Measuring
Wolfschmidt, Gudrun The Schmidt Telescope - a Highlight in Astrophotography

17.30-19.30

T35 SCIENTIFIC INSTRUMENTS: NEW METHODS IN 19TH & 20TH CENTURY OBSERVATORIES
Room A2 *chair: Gloria Clifton*
Freiburger, Dana A Teaching and Research: Shifting Trajectories of Science at Georgetown University in the Nineteenth Century
Huisman, Jan W Ranking the stars; the Magnum Opus of J.C.Kapteyn
Le Guet Tully, Françoise C. and Astronomical Sites and Instruments as World Heritage: the case of 19th and 20th century observatories
Jean Davoigneau Advanced Instruments and informal scientific bodies: the first observations of Venus and Mercury by radar
Borisov, Vasily P.

1 August (Saturday)

09.00-11.00

T35 SCIENTIFIC INSTRUMENT COMMISSION: PLENARY BUSINESS MEETING
Room A2 (The Scientific Instrument Commission would like to use this slot for our annual business meeting. The meeting is open to anyone interested in the Commission's activities.)

11.30-13.30

T35 SCIENTIFIC INSTRUMENTS: PHYSIOLOGY AND MEDICINE

	Room A2	<i>chair: Richard Kremer</i>	
		Hui, Alexandra E	Instruments of Music as Instruments of Science: Hermann von Helmholtz's Sound Sensation Studies, his Classicism, and his Beethoven Sonata
		Wautier, Kristel, Alexander Jonckheere, and Danny Segers	The early years of histological research at Ghent University (Belgium)
		Hicks, Robert D	Bringing Physics to the Physicians
		Stapleton, Darwin H.	"What Happened on the East River: the Synergy of Scientific Instrument Development at the Rockefeller Institute and the RF Virus Laboratory"
11.30-13.30	S24	GLOBAL VISIONS? THE TELESCOPE BETWEEN COMPETITION AND COLLABORATION	
	Room A9	<i>chair: Sven Dupré</i>	
		Sven Dupré	Introduction: The Telescope Between Competition and Collaboration
		Giorgio Strano	Galileo's Shopping List: an Overlooked Document About Early Telescope Making
		Inge Keil	Johann Wiesel 's Telescopes and his Clientele
		Huib J. Zuidervaart	Astronomical Sites in the Dutch Republic, or the Changing Use of the (Astronomical) Telescope in Institutional and Private Settings During the 17th and 18th Centuries
		Jim Bennett	The Art of Polishing: Practice and Prose in 18th-century England
15.00-17.00	T35	SCIENTIFIC INSTRUMENTS: WHAT MANUALS & MANUSCRIPTS TELL US	
	Room A2	<i>chair: Peggy Kidwell</i>	
		Phillipson, Tacye	Doing it by the Book
		Carvalho, Sara R. D. S.	Liebig's Kaliapparat: a case study on the material culture of chemistry
		Carletti, Christian	Buying Instruments: Costs of an Experimental Culture. The Case of the Physics Laboratory at Padua University (1847-1857)
		Oestmann, Günther	En route to the „German Chronometer“: The Introduction of Precision Timekeeping in the German Mercantile Marine and Imperial Navy in the 19th century
15.00-17.00	S24	GLOBAL VISIONS? THE TELESCOPE BETWEEN COMPETITION AND COLLABORATION	

Room A9 *chair: Sven Dupré*

Gloria C. Clifton

Networks of Telescope Makers and the Evolution of Skill: The Evidence From Observatory and Museum Collections

Nicky Reeves

Astronomy in the Field: Mason, Dixon and the Greenwich Observatory, 1763 - 1768

Klaus Staubermann

Dollond or Fraunhofer: Instruments and Practices for Early Nineteenth Century Star Chart Observations

Pedro M.P. Raposo

The Limits of the Universe and the Limits of the Telescope: A Controversy on Stellar Distances in the Nineteenth Century

17.30-19.30

T35

SCIENTIFIC INSTRUMENTS: TEACHING AND STUDENT LABORATORY APPARATUS

Room A2 *chair: Tacye Phillipson*

Whitmer, Kelly J.

Models as Material Ideas. Teaching Useful Knowledge with Irenical Instruments in the early Enlightenment

Turner, Steven C.

The Inclined Plane: a new look at a (very) old instrument

Peres, I. Marília

Scientific Instruments in the Polytechnic School of Lisbon: the 19th Century Collection of Optical Instruments

Cirino, Sergio D.,
Kennon A. Lattal, Rodrigo L. Brazil
Miranda, and Robson N.
Cruz

Skinner box in Psychology didactic Laboratories in

17.30-19.30

S24

GLOBAL VISIONS? THE TELESCOPE BETWEEN COMPETITION AND COLLABORATION

Room A9 *chair: Sven Dupré*

Steve Ruskin

Topography as Instrument: High-Altitude Telescope Observations and the Rocky Mountain Eclipse of 1878

David H. DeVorkin and
Teasel Muir-Harmony
Robert W. Smith
Mario Biagioli

The Smithsonian Institution's Contribution to Global Networking in Astronomy
The Making of Space Astronomy
Commentary