

Friday, September 7 at Harvard	
8:45-8:55	Welcoming Remarks Announcements
9:00-10:20	(1) Plenary Session Big Questions / Provocative Ideas: On Classification, Art, Collectors, and Museums
	<p>Jim Bennett Were There ‘Surveying Instruments’ in the 16th Century?</p> <p>Paolo Brenni From Paris to “Ole Miss”: Silbermann’s Optical Paintings in the Historical Collection of the University of Mississippi</p> <p>Silke Ackermann Drecker Collection Sold!</p> <p>Robert Anderson Where Has All the Chemistry Gone?</p>
10:20-10:35	coffee break
Parallel Sessions:	
10:40-12:00	(2) Instruments on Expeditions
	<p>Jane Wess The Role of Surveying Instruments in the Scramble for Africa</p> <p>Richard A. Paselk The Instruments and Intentions of Alexander von Humboldt: The South American Expedition of 1799–1804</p> <p>Hans Hooijmaijers The 1874 Venus Transit: A Dutch Expedition</p> <p>James Caplan The Borda-Lenoir Repeating Circle No. IIII</p>

10:40-12:00	(3) Four Approaches to Navigation
	<p>J. Tate K. Eremin D. H. Caldwell A. D. Morrison-Low L. Troalen</p> <p>Robert D. Hicks</p> <p>Richard Dunn</p> <p>José Manuel Malhão Pereira</p> <p>What Is the Point? The Analysis of Some Navigational Instruments from Shipwrecks</p> <p>Shadow Theory and the Evolution of Altitude-Measuring: Navigational Instruments: A Muslim Connection?</p> <p>Plumbing the Depths with the First Baron of Science</p> <p>Experiences with Ancient Nautical Instruments</p>
12:00-12:45	lunch
12:00-6:00	Poster Session (part A) –Posters on view
12:45-1:15	SIC Business Meeting
Parallel Sessions:	
1:20-2:40	(4) Early Modern Telescopes and Astronomical Instruments
	<p>Marvin Bolt Michael Korey</p> <p>Peter Abrahams</p> <p>Yaakov Zik Giora Hon</p> <p>Michael Korey Karsten Gaulke</p> <p>Trumpeting the Shape of Early Telescopes</p> <p>The Camera Obscura as a Telescope</p> <p>The Birth of a Scientific Instrument: The Ecliptic Instrument of Johannes Kepler (1571-1630)</p> <p>Kepler and the Automata: An Imperial Mathematician with a Critical Eye</p>

1:20-2:40	(5) Instruments of Physics Circa 1875-1930	
	Dirk van Delft	Freezing Physics: The Cailletet Compressor of Heike Kamerlingh Onnes
	I. M. Peres I. Serra E. Maia	The Gas Discharges in History and Teaching of Physics and Chemistry
	Mott Linn	The Scientific Instruments and Laboratories Michelson used for his Nobel Prize-Winning Experiment
	I. Serra F. Bragança Gil	The Relevance of Building Scientific Instruments: a Case Study
2:45-3:45	(6) Instruments, Epistemology, and the Material Culture of Early Modern Representation	
	Daniel Margocsy	Disposable Tools: The Epistemological Role of Cheap Anatomical Preparates in the Netherlands, c. 1700
	Stephen Johnston	From Mathematics to Philosophy: Thomas Digges, Magnetism and the Renaissance Sundial
	Jean-François Gauvin	Music, Machines, and Theology: Marin Mersenne's Organ as a Christian Symbol of Natural Philosophy
2:45-3:45	(7) Cosmic Rays and Northern Lights	
	Sofia Talas	The Fedaiia Laboratory: A Mountain Laboratory for Cosmic-Ray Researches in the 1950s
	Falk Müller	Polar Expeditions and the Development of Electron Optics at the AEG in the 1930s
	Ad Maas	Machinations, Manipulations and Cosmic Ray-measurements: Jacob Clay and the Discovery of the Latitude Effect
3:45-4:00	snack break	

4:00-5:20	(8) Instruments of Instruction	
	John L. McKnight	Natural Philosophy for a New Nation: The Philosophical Cabinet and Teaching at the College of William & Mary after the Revolution
	Steven Turner	Science Education in Post-frontier America: Who Chose the Curriculum; Who Furnished the Laboratories?
	Samuel Gessner	Of Texts and Instruments: Teaching of “Arithmetica Practica Geometrica Logarithmica” at the Jesuit College in Lisbon, 17th Century
	Sébastien Soubiran	Physics on the Border: A French and German History of the Physics Instruments Collection of the University of Strasbourg
4:00-5:00	(9) Instruments of the Cold War	
	Kent H. Lundberg	Instruments of Destruction: The Use of High-Speed Oscilloscopes in Atomic-Weapons Testing in the 1950s and 1960s
	Karl Grandin	A Frontier Within: Sweden’s National Atomic Energy Program and the Development of Physics in Sweden
	Philip Davis Loring	Electronic Talking Machines in Cold War America
5:00-6:00	(10) Instruments for Eyes and Ears	
	Roland Wittje	Exploring Urban Soundscape: Electro-acoustics and the Measurement of Reverberation
	Latif Nasser	Reading Machines Reading Eyes Reading Machines: Films as Scientific Instruments in the 1930s
	David Fleishman	Eyeglasses through the Ages

5:30-6:00	Poster Session (part B)–authors available to answer questions	
	Asif Islam Khan H. M. Iftekhar Jaim	Crescograph, the First Device for Microscopic Plant-Growth Movement Measurements: Perspectives and Its Impact on Plant Research
	Dominique Bernard Alain Canard Jean-paul Taché William Tobin	The Physics Apparatus Collection at the University of Rennes 1 (Brittany - France)
	I. M. Peres E. Maia F. Costa	Spectroscopy Instruments and the Teaching of Chemistry in the Polytechnic School of Lisbon (1860-1960)

Saturday, September 8 at MIT	
8:45-8:55	Welcoming Remarks Announcements
9:00-10:40	(11) Plenary Session: The Trade and Manufacture of Instruments in Colonial North America
	<p>Gloria Clifton Connections Between the Instrument-Making Trades in Great Britain and Ireland and the North American Continent</p> <p>Willem FJ Mörzer Bruyns Evidence of the Use of English Octants by American Seamen up to circa 1850</p> <p>Sara Schechner A Tale of Two Electrical Machines: Making Do in Colonial Boston</p> <p>Richard L. Kremer “Making One of Saturn’s Moon”: Instrument Making before 1840 along New England’s Northern Frontier</p> <p>Laura Cházaro Trade in Medical Instruments and Colonialist Policies between Mexico and Europe in the 19th Century</p>
10:40-10:55	coffee break
Parallel Sessions	
11:00-12:40	(12) Instrument Makers and Workshop Practices
	<p>Alexi Shannon Baker From Wapping to Westminster: An Instrumental Trade in Pre-Industrial London</p> <p>Peter de Clercq Auction Sales of the Stock in Trade and Working Tools of 18th-Century London Instrument Makers</p> <p>A. D. Morrison-Low Location, Location, Location: English Provincial and London Metropolitan Makers During the Industrial Revolution</p> <p>Gudrun Wolfschmidt The Development of the Scientific Instrument Making Company Carl Bamberg in Berlin</p> <p>Steve Beare Lawrence C. Francis, Contract Philadelphia Instrument Maker for Queen and McAllister</p>

11:00-12:20	(13) Analysis and Restoration of Instruments	
	Jeffrey D. Lock	A David Rittenhouse Telescopic Theodolite
	Giorgio Strano	Restoring Santucci's Armillary Instrument at the Institute and Museum of the History of Science of Florence
	Florin Stanescu	Astronomical Instruments of the Antiquity: A Probable Sundial "Discus in Planitia" at Sarmizegetusa-Regia, Romania
	Kathy Eremin	[Metallurgical Analyses of Brass Instruments: What We Learn about Workshop Practices]
12:40-1:30	Lunch	
1:30-2:30	(14) Mathematics, Multiple Choice, and Medicine	
	Marie-José Durand-Richard	Planimeters and Integrals in the 19th Century: Before the Differential Analyser
	Shae Trewin	Man, Monkey and Multiple Choice: Robert Yerkes and the Rise of Comparative Psychology
	Caroline Jean Acker	Reducing the Risks of the Hypodermic Syringe: From Physician-Managed Innovation to Mundane Disposability
1:30-2:30	(15) Replication of Instruments and Experiments	
	Jim and Rhoda Morris	Precise Replication of Galileo's Historical Telescopes from a Scientist's Perspective
	Elizabeth Cavicchi	Recreating the Bead Lens of a 17th Century Simple Microscope
	Thomas F. Peterson, Jr.	Discovery through Replication of Historic Experiments: Revisiting Michael Faraday's "Cage" and "Ice Pail"

2:35-3:35	(16) Big Telescopes	
	John W. Griesé, III	The Role of the Large Refractor in Parallax Studies: The 20-Inch Clark at the Van Vleck Observatory
	John C. Pearson	The 40-Foot Solar Eclipse Telescope of the Lick Observatory
	Tacye Phillipson	SCUBA: Diving into the Cosmos
2:35-3:35	(17) Epistemological Questions about Instruments	
	Alistair Kwan	Can Talismans be Scientific Instruments?
	Koen Vermeir	The Meaning and Reality of Scientific Instruments
	Luis Mauricio Rodríguez Salazar	Material Instruments and Mathematical Instruments as Extensions and Extensors of the Cognitive Actions of the Subject: Their Epistemological Meaning in the Frame Work of a New Experience Notion
3:35-3:50	snack break	
3:50-4:00	Group Photo	
4:00-5:15	MIT Lab Tours	
5:30-7:30	MIT Museum Reception	

Sunday, September 9 at Yale		
	(18) Talk at Observatory	
	Robert Gordon	Sixteenth-Century Metallurgy and Manufacturing Technique Revealed in the Yale Astrolabe