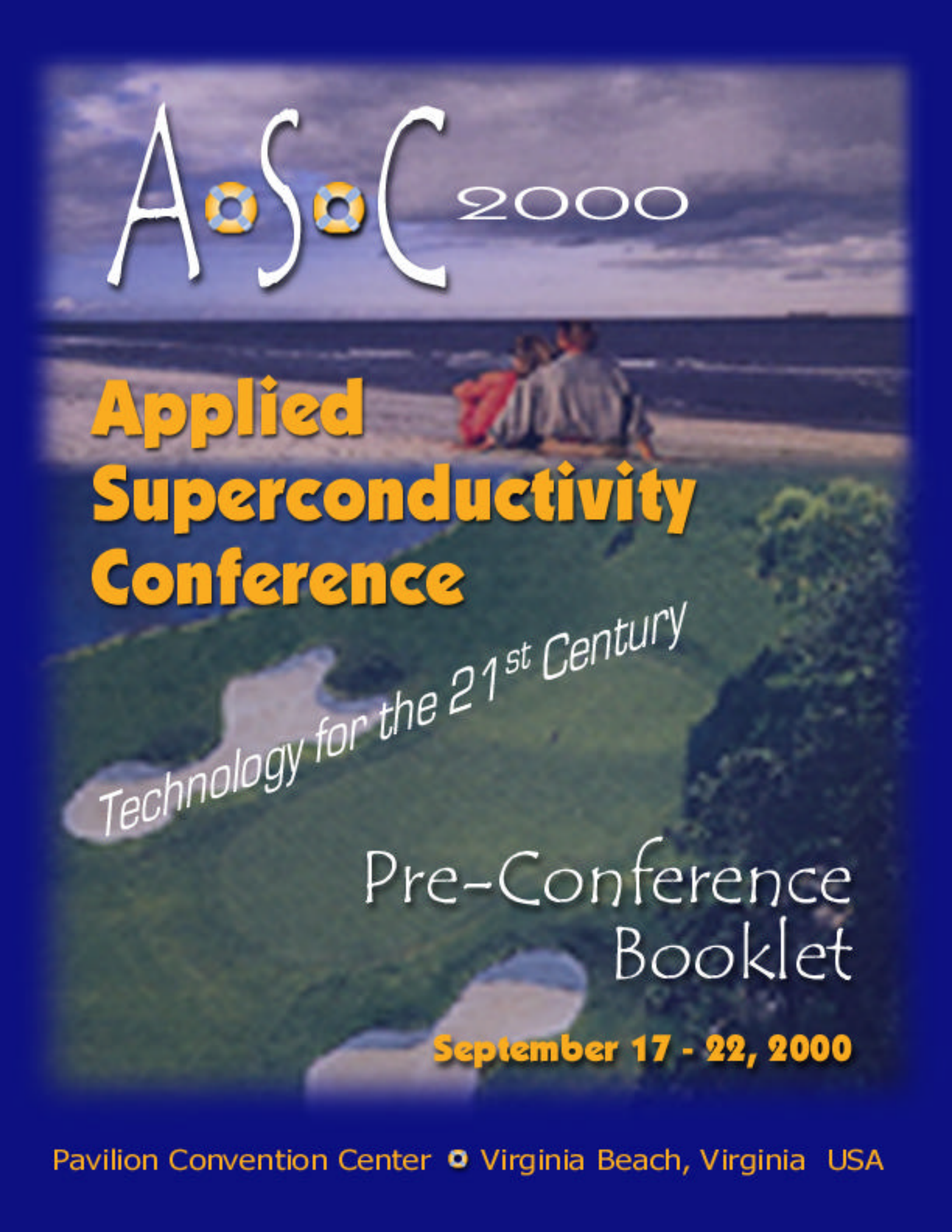
A·S·C 2000
Applied Superconductivity Conference
Technology for the 21st Century
Pre-Conference Booklet
September 17 - 22, 2000
Pavilion Convention Center · Virginia Beach, Virginia USA

Tuesday Public Lectures (Pavilion Convention Center) 8:00pm - 10:00pm

The Race for High Temperature Superconductivity
Paul (C.W.) Chu, University of Houston

Bringing Power to the People -- The Coming Age of Superconductivity
Paul Grant, Electric Power Research Institute (EPRI)

Wednesday Poster Sessions (Pavilion Convention Center) 2:00pm - 4:00pm

Welcome
Harold Weinstock, ASC Chairman, AFOSR; and Hermann Grunder, Director, Thomas Jefferson National Accelerator Facility

3EA SQUIDs for Biomagnetism

3EA01 Whole-head SQUID system of namo-meter SNS junctions in a superconducting magnetic shield
Hiroshi Ohta, Toshiaki Matsui, Communications Research Laboratory; Yoshinori Uchikawa, Tokyo Denki University.

3EA02 Low-noise biomagnetic measurements with a multichannel SQUID-System at 77 K
H.-J. Barthelmess, M. Halverscheid, M. Schilling, Universitaet Hamburg.

3EA03 On the sensor head of a HTc SQUID-based fetal heart monitor
A.P. Rijpma, H.J.M. ter Brake, E. de Vries, H.J. Holland, H. Rogalla, Department of Applied Physics, University of Twente, PO Box 217, 7500 AE Enschede, The Netherlands.

3EA04 Application of High Tc SQUID Magnetometer to Biological Immunoassays
Keiji Enpuku, Tadashi Minotani, Masahiro Hotta, Atsushi Nakahodo, Department of Electronics, Kyushu University.

3EA05 Application of High Tc SQUID Magnetometer for Sentinel-Lymph Node Biopsy
S. Tanaka, A. Hirata, Y. Saito, Toyohashi Univ. of Technology; Y. Tamaki, I. Sakita, M. Monden, Graduate School of Medicine, Osaka Univ..

3EA06 Reduction of Non-periodical Extramural Magnetic Noises in MEG Measurement by Continuously Adjusted Least Squares Method
Y. Adachi, M. Shimogawara, M. Higuchi, Kanazawa Institute of Technology; Y. Haruta, Yokogawa Electric Corp.; M. Ochiai, Keio University.

3EA07 16 channel operation of high Tc SQUID magnetometers for magnetocardiogram
H. C. Kwon, I. S. Kim, Y. H. Lee, J. M. Kim, Y.K. Park, Korea Research Institute of Standards and Science.

3EA08 HTS SQUID Gradiometry for Magnetocardiography Using Different Noise Cancellation Techniques
M. Bick, G. Panaitov, Y. Zhang, H.-J. Krause, FZJ, Germany; K. Sternickel, A. Effern, ISKP, Universitaet Bonn, Germany.

3EA09 Improvement of a Technique for Localization of Steel Needles in Humans Using a SQUID Magnetometer
C. Hall Barbosa, E. Costa Monteiro, E. Andrade Lima, P. Costa Ribeiro, Catholic University of Rio de Janeiro.

3EA10 High-Tc Superconducting rf Receiver Coils for Magnetic Resonance Imaging of Small Animals
Jaroslaw Wosik, Feinian Wang, Mikhail Strikovski, Lei-Ming Xie, John H. Miller Jr., Texas Center for Superconductivity at University of Houston; Krzysztof Nesteruk, Polish Academy of Sciences, Warszawa, Poland; Mehmet Bilgen, Ponnada A. Narayana, Radiology Dept., University of Texas-Houston Medical School.

3EA11 High Temperature Superconducting RF Coils for MRI Application
Q.Y. Ma, E. Gao, The Jockey Club MRI Engineering Center, University of Hong Kong, Columbia University; K.C. Chan, J. Fang, M.S. Chow, K.K. Wong, E.S. Yang, The Jockey Club MRI Engineering Center, University of Hong Kong; H. Xu, E.X. Wu, Columbia University; D.F. Kacher, G.S. Young, F.A. Jolesz, Brigham and Women’s Hospital, Harvard Medical School.

3EB Detectors II

3EB01 Single Photon 1-D Imaging X-ray Spectrometers
L. Li, K. Segall, C. Wilson, L. Frunzio, D. Prober, Department of Applied Physics, Yale University; A. Szymkowiak, S. Moseley, NASA Goddard Space Flight Center.

3EB02 Development of Submillimeter-wave Camera for Atacama Submillimeter Telescope Experiment
Hiroshi Matsuo, National Astronomical Observatory of Japan; Seiichirou Ariyoshi, Tohoku University; Hiromichi Akahori, Shinshu University; Masanori Takeda, Takashi Noguchi, Nobeyama Radio Observatory.

3EB03 RF Single Electron Transistor Readout Amplifiers for Superconducting Astronomical Detectors for X-ray to sub-mm Wavelengths
Thomas Stevenson, Orbital & NASA/GSFC; Abdelhanin Aassime, Per Delsing, Chalmers University; Luigi Frunzio, Liqun Li, Daniel Prober, Robert Schoelkopf, Ken Segall, Chris Wilson, Yale University; Carl Stahle, NASA/GSFC.

3EB04 Spatially resolved study of superconducting tunnel junction x-ray detectors by Low Temperature Scanning Synchrotron Microscopy
Harald Pressler, Masataka Ohkubo, Masaki Koike, Tatsuya Zama, Naoto Kobayashi, Electrotechnical Laboratory; Daiji Fukuda, University of Tokyo.

3EB05 A Microstrip-coil Integration on Superconducting Tunnel Junctions for X-ray Detector
T. Taino, H. Nakagawa, M. Aoyagi, H. Sato, H. Akoh, Electrotechnical Laboratory; K. Maehata, K. Ishibashi, Kyushu University; H. Sato, T. Ikeda, H.M. Shimizu, Riken.

3EB06 A High-resolution X-ray Detection System using STJ and SQUID Amplifier
Tokihiro Ikeda, H. Sato, H. Kato , K. Kawai, H. Miyasaka , T. Oku, W.Ootani , C. Otani, H. M. Shimizu , Y. Takizawa, H. Watanabe , Riken; H. Nakagawa, H. Akoh , M. Aoyagi, Electrotechnical Laboratory; T. Taino, Kyushu University.

3EB07 Spectral Features of Substrate Phonon Events Obtained with Superconducting Tunnel Junctions by Illuminating with X-rays
C. Otani, T. Ikeda, H. Kato, K. Kawai, H. Miyasaka, T. Oku , W. Ootani , H. Sato , H.M. Shimizu , Y. Takizawa , H. Watanabe , Riken; H. Nakagawa , H. Akoh , M. Aoyagi , T. Taino , ETL.

3EB08 Detection of Heavy Ions using Nb-based Superconducting Tunnel Junction
Hiromi Sato, Hirohiko M. Shimizu, Yoshiyuki Takizawa, Wataru Ootani, Fuyuki Tokanai, Koji Morimoto, Isao Tanihata, Riken; Hiroshi Akoh, Hiroshi Nakagawa, Masahiro Aoyagi, Electrotechnical Laboratory.