4-7-4 JLR-1 SHM Session Celebrating Joe Rose's accomplishments in ultrasonics (tentatively Monday am)

| *No.* | *Authors* | *Affiliations* | *Title* |
|---|---|---|---|
| 961 | **Joseph L Rose** | Penn State | *Ultrasonic guided wave success stories and challenges in NDT and SHM* |
| 396 | Weibin Li, **Younho Cho**, Jaesun Lee, Ik-Keun Park | Pusan National Univ., Seoul National Univ. of Technology | *The effect of heat treatment on acoustic nonlinear parameters of Inconel* |
| 384 | **Huidong Gao**, Borja Lopez, Syed Ali, John Flora, Jeffrey Monks | Innerspec Technologies, Monks | *Inline testing of ERW tubes using ultrasonic guided wave EMATS* |
| 1329 | **Jason K Van Velsor**, Joseph L Rose, Li Zhang | FBS Inc, Penn State | *Circumferential guided wave methods for the in-line inspection of pipe* |

4-7-5 JLR-2 SHM Session Celebrating Joe Rose's accomplishments in ultrasonics (tentatively Monday pm)

| *No.* | *Authors* | *Affiliations* | *Title* |
|---|---|---|---|
| 765 | **Ajit Mal** | UCLA | *Guided wave based health monitoring of composite structures* |
| 964 | **John Popovics** | University of Illinois at Urbana-Champaign | *Developments in sensing and imaging for civil structures* |
| 553 | **Fei Yan** | FBS Inc | *Nondestructive evaluation of a boiler tube with wall thinning using ultrasonic guided waves* |
| 1278 | **Xiaoliang (George) Zhao** | Intelligent Automation Inc | *Wireless guided wave transducer network for bridge structural health monitoring* |
| 320 | **Cliff Lissenden**, Hwanjeong Cho | Penn State | *Health monitoring of aluminum joint with fasteners using guided waves* |

4-7-6 JLR-3 SHM Session Celebrating Joe Rose's accomplishments in ultrasonics (tentatively Monday pm)

| *No.* | *Authors* | *Affiliations* | *Title* |
|---|---|---|---|
| 466 | Jin-Yeon Lim, Laurence Jacobs, **Jianmin Qu** | Georgia Tech, Northwestern University | *Higher order harmonics and their applications in nondestructive damage assessment in metallic materials* |
| 630 | **Bernhard R Tittmann**, Manton J Guers, Cliff Searfass, David Parks | Penn State | *Ultrasonic sensors for harsh environments* |
| 840 | **Jing Mu**, Li Zhang | FBS Inc | *Guided wave active and synthetic focusing techniques in pipe inspection* |
| 1375 | **Ajit Mal**, Fabrizio Ricci, Ernesto Monaco, Leonardo Lecce, Simone Tancredi, Sauvik Banerjee | UCLA, University of Naples Federico II, IIT Bombay | *Simulation and testing of ultrasonic guided waves for PZT based sensing of structural components and damage detection* |
| 1377 | **Padmakumar Puthillath**, Cliff J Lissenden, Joseph L Rose | Penn State | *Theoretically driven parameter selection for ultrasonic guided wave inspection of adhesive bonding* |

4-7-7 JLR-4 SHM Session Celebrating Joe Rose's accomplishments in ultrasonics (tentatively Tuesday am)

| *No.* | *Authors* | *Affiliations* | *Title* |
|---|---|---|---|
| 498 | **Victor Giurgiutiu** | University of South Carolina | *Piezoelectric wafer active sensors for structural health monitoring – state of the art and future directions* |
| 1076 | **Debaditya Dutta**, Hoon Sohn, Jin Y Yang | Carnegie Mellon University, Korea Advanced Institute of Science and Technology | *A non-contact structural health monitoring system through laser based excitation and sensing of ultrasonic guided waves* |
| 1323 | **Roger Royer**, Fei Yan, Joseph L Rose | FBS Inc, Penn State | *Ultrasonic guided waves for large area structural health monitoring* |
| 439 | **Manton J Guers**, Bernhard R Tittmann | Penn State | *Guided waves for in-situ monitoring of specimens in reactor environments* |
| 1384 | **Jaya Koduru**, Joseph L Rose | Penn State | *Defect detection in composite structures using guided wave phased arrays* |

4-7-1 SHM-1 Structural Health Monitoring (tentatively Tuesday pm)

| *No.* | *Authors* | *Affiliations* | *Title* |
|---|---|---|---|
| 1350 | **Joseph Cusumano**, Arjun Roy, Sergey G Abaimov | Penn State | *Simulated space-time failure statistics for a new coupled-field damage model* |
| 550 | **Brandon Zwick**, Douglas E Adams, Dave J Koester | Purdue University | *Structural health monitoring in composite materials using vibration reciprocity measurements* |
| 1197 | **David Johnson**, KW Wang, Jun-Sik Kim | University of Michigan, Kumoh National Institute of Technology | *Determining a proper interrogation signal for use in a nonlinear, breathing crack detection technique* |
| 548 | **Jacob Loverich**, Michael Grissom, Joe Szefi, Steve Wenner, Zach Fuhrer | KCF Technologies, Invercon, Lord Corporation | *Smart rodend with embedded wireless load sensing* |
| 1325 | **Karl Reichard**, Brenton Forshey, Eli Hughes, Mark Turner | Penn State | *Wireless monitoring of wind turbine blade health* |

4-7-2 SHM-2 Structural Health Monitoring (tentatively Tuesday pm)

| *No.* | *Authors* | *Affiliations* | *Title* |
|---|---|---|---|
| 421 | **Jandro L Abot**, Mark J Schulz, Vesselin N Shanov, Yi Song, Maruthi Srivatsavaya | University of Cincinnati | *Mode II delamination detection in composite materials using carbon nanotube sensor thread* |
| 1060 | **Wonchang Choi**, Hyun-Do Yun | North Carolina A&T State University, Chungnam National University | *Flexural damage evaluation of reinforced concrete beams strengthened with CFRP* |
| 1348 | **Kimberly Cook-Chennault**, David Cosaboon, Mickey Whitzer, Danielle Castley | Rutgers, Drexel University | *Enhanced output voltage and power from aluminum-PZT-Portland cement composites* |
| 322 | **Mykanth R Mada**, Sri Bandyopadhyay | University of New South Wales | *Development of activated charcoal-PMMA composites with superior electrical conductivity and surface hardness properties* |
| 1438 | **Ik-Keun Park**, Kyoung Young Jhang, Tae Hoon Lee, Chung Seok Kim | Seoul National University of Technology, Hanyang University | *Defects characterization for structural health monitoring using classical and nonclassical nonlinear acoustics* |

4-7-3 SHM-3 Structural Health Monitoring (tentatively Wednesday am)

| *No.* | *Authors* | *Affiliations* | *Title* |
|---|---|---|---|
| 1437 | **Ignacio Perez**, John Kinzer, Mike Yu, Bill Frazier, Nam Phan | Office of Naval Research, Naval Air Systems Command | *Rotorcraft structural health and usage monitoring--navy perspective* |
| 424 | **Mark Seaver**, Engin Aktas, Stephen T Trickey | Naval Research Laboratory, Izmir Institute of Technology | *Evaluating sensor performance via ROC curves as low energy impacts damage a composite wing* |
| 839 | Nathanael C Yoder, **Douglas E Adams** | Purdue University | *Robust crack detection in geometrically complex metallic components using vibro-acoustic modulation* |
| 1214 | **Aditi Chattopadhyay**, Cristobal Hiche | Arizona State University | *Impact localization and damage estimation on a composite wing using fiber Bragg grating sensors* |