MARCH 2023

The Beam Pulse

The latest highlights in Accelerator Directorate

Celebrate Women's History Month

Mar 24, 10-11a CST: Beyond Limits: A Physician-Scientist's Story of Overcoming Challenges

Join us in celebrating Women's History Month by hearing the remarkable journey of **Dr. Farzana Z Ali, a physician-scientist, biomedical engineer and public health researcher**. After being left paralyzed by a drunk driver, Dr. Ali persevered through immense adversity to become a trailblazer as the first quadriplegic student in her medical and graduate programs. Now as an NIH-funded researcher, **she is at the forefront of artificial intelligence for medical imaging and digital health**. (*Join the Zoom event here.*)

Mar 28, 11a-12p CST: DOE Celebrates Women's History Month

This year's program includes opening remarks from Jennifer M. Granholm, Secretary of Energy, a keynote address from Dr. Geraldine (Geri) Richmond, Under Secretary for Science and Innovation and a message from Professional Opportunities for Women at Energy Realized (POWER) Deputy Director Veronica Jackson. (Join the Zoom event here.)

Mar 30, 11a-12p CST: No Woman Left Behind: Bridging the Gap

In a world where women have historically faced polarizing life decisions and challenges that can result in career gaps, we will facilitate discussion and awareness such that no women are left behind. This event will feature panelists from 4 different national labs and their experiences navigating the challenges that come with breaks in their careers, caretaking, and other difficulties that women especially experience in feeling left behind. (*Join the Zoom event here.*)

TODAY: Sign up for the Fermilab Young Professionals <u>Buddy Program!</u>

Do you need help adjusting to lab life?

Can you show a new person around?

Connect with your organization!

If you've been helped, consider paying it forward!

Mar 24: Kevin McDonough's Retirement Party

2-3p CST, XGW Huddle

Apr 1: April Fool's Day

Apr 7: URA Engineering Award nominations due

All engineer staff and researchers at Fermilab or URA member institutions who have completed an engineering degree are eligible. The work for which the award is made must be conducted by an engineer at Fermilab or in collaboration with Fermilab technical staff, scientists, and engineers. The work may be experimental, theoretical, or a contribution to instrumentation, computing, technology, or innovation.

Apr 5: Inclusion Matters 2023: Psychological Safety in the Workplace Zoom, 1-2p CST (register here)

Psychological safety is the belief that it's OK to take interpersonal risks without fear of undue consequences. In a psychologically safe environment, people are more likely to speak up when they see their team or organization heading down the wrong path. This workshop will be facilitated live by ComPsych-EUAP.



NuMI beam returned after horn work

"NuMI beam brought to you by Main Injector dept ③." Machine experts commemorate the good news with a beam commissioning selfie in the Main Control Room on the Feb. 28 evening shift. Photo: Nino Chelidze.

The first in-person session of the U. S. Particle Accelerator School since Winter 2020 was hosted Jan. 23 - Feb. 3 in Houston, TX, and sponsored by Northern Illinois University. AD was represented by four instructors and teaching assistants, nine students, two IT coordinators and two staff: the greatest participation of all Fermilab organizations in attendance. Visit the <u>USPAS website</u> for information about the school and upcoming programs. Photos: USPAS.

Brian Chase retires after 40 years

Many friends and colleagues gathered in the Cross Gallery West Huddle to wish Brian well in retirement with cake, coffee and stories on Feb. 21. Not photographed: about a dozen people waiting to get in from the hallway! Read his retirement article here. Photo: Paul Derwent.





Left to right: Denise Finstrom and Beau Harrison accept the Technology Accelerating Science Award presented by Vanessa Z. Chan, Lia Merminga and Whitney Begner. Photos: Creative Services.



David Johnson (left) and Todd Johnson (right) accept patent awards.



Michael Geelhoed

Thomas Kroc

Michael Geelhoed

Water Purification System (U.S. Patent #11,465,920)

Curtis Baffes

System for Sealing Flanged Connections (U.S. Patent #11,353,450)

David Johnson, Todd Johnson

Method and System for Arbitrary Optical Pulse Generation (U.S. Patent #11,323,105)

AD at the Inventor Recognition Ceremony

Fermilab's Annual Inventor Recognition Ceremony was held on Feb. 23 in Ramsay Auditorium. AD's representation included four patent awardees, three invention and software disclosures and a **Technology Accelerating Science Award** presented to the Accelerator Controls Network (ACNET) Development Team.

Patent Awardees

Thomas Kroc

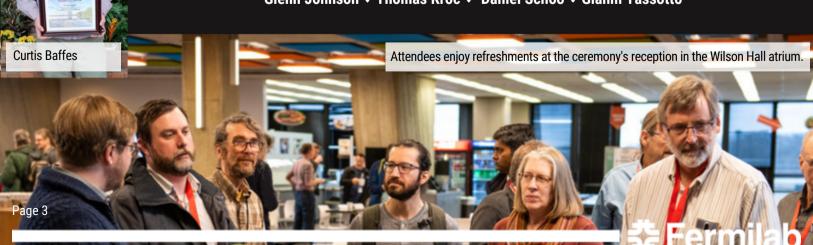
Permanent Magnet E-Beam/X-ray Horn (U.S. Patent #11,291,104)

Thomas Kroc et al.

SRF E-Beam Accelerator for Metal Additive Manufacturing (U.S. Patent #11,224,918)



Glenn Johnson ⋅ Thomas Kroc ⋅ Daniel Schoo ⋅ Gianni Tassotto



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Phil Adamson • Seung-Chan Ahn • Omar Al Atassi • Rni Alves Pires • Demetrius Andrews • Gerald Annala • William Ashmanskas • Mark Austin • Mike Backfish • Charles Bacon • Debra Baddorf • William Badgett • Peter Bagley • Purnima Balakrishnan • Dennis Barak • Barry Barnes • Kevin Barson • Steve Beck • Michael Begel • Chandra Bhat • Frank Bieniosek • Dixon Bogert • Brian Bolek • Timofei Bolshakov • Andrew Braun • Charlie Briegel • Daniel Broemmelsiek • Jim Budlong • Kelly Cahill • Kevin Cahill • Jerry Cai • Jialing Cai • Linden Carmichael • Lee Chapman • Dinker Charak • Brian Chase • Salah Chaurize • Mike Church • Joe Compton • Mary Convery • Darren Crawford • Edward Dambik • Kwasi Danquah • Michael Davidsaver • Douglas Davis • George Deinlein • Paul Derwent • John DeVoy • John Diamond • Brian Drendel • Jonathan Edelen • Dean Edstrom • Joshua Einstein-Curtis • Paul Emma • Keith Engell • Nicholas Evans • Denise Finstrom • Jerry Firebaugh • Alex Fishbeck • Martin Fitzgerald • Robert Florian • Steve Foulkes • Mike Frey • Gary Ganster • Fernanda Garcia • Matthew Gardner • Gabriele Garzoglio • Consolato Gattuso • Mike Geelhoed • Krzysztof Genser • Eliana Gianfelice • Michael Glass • Keith Gollwitzer • Mariana Gonzalez • Bob Goodwin • John Goodwin • Mike Gormley • Krish Gounder • Bathsheba Grossman • Tom Groves • Victor Grzelak • Gerald Guglielmo • Michael Guzman • Mike Halling • Mike Hand • Pierrick Hanlet • Bruce Hanna • Elvin Harms • Beau Harrison • Kyle Hazelwood • Brian Hendricks • David Herrup • Andy Hocker • James A. Holt • Guan Hong Wu • Caius Howcroft • Martin Hu • Jim Huang • Yuri Ivanov • Gerry Jackson • Andreas Jansson • Dave Johnson • Glenn Johnson • Stan Johnson • Teresa Johnson • Bob Joshel • Kevin Junck • Valery Kapin • Patrick Karns • Guennadi Karpov • Paul Kasley • Peter Kasper • Dale Keehan • David Kestenbaum • Charlie King • Terry Kiper • Wally Kissel • Dave Kline • Thomas Kobilarcik • John Kolpin • William Krakar • Brian Kramper • John Kuharik • Alexander Kulyavtzev • Nikolay Kuropatkin • Jim Lackey • Sharon Lackey • Valeri Lebedev • Paul Lebrun • Michelle Lentz • Katie Leveling • Tony Leveling • Clint Lewsader • Saul Lipton • Joseph Longo

! The Technology Accelerating Science Award was given to the ! ACNET Development Team for sustained innovation in the ! development and deployment of technology that has enabled ! world class particle physics at Fermilab. This award ! recognizes the contributions of 267 authors over several ! decades to ACNET, which includes control system front-end ! and central services software and user applications. ! Those authors are listed here and those highlighted are ! still in AD today.

Eugene Lorman • Boris Lublinsky • Peter Lucas • Ben Mack • Jerry Makara • Vern Mandondji-Bangole • Jaime Mantel • John Marriner • William Marsh • Owen Marshall • Mike Martens • Kevin Martin • Glenn Mayer • Dan McArthur • Meghan Mcateer • Dennis Mcconnell • Elliott McCrory • Michele McCusker-Whiting • David Mcdowell • David Mcginnis • Kevin Mcguire • Jack Mealy • Marc Mengel • Tom Meyer • Geoff Mills • Maxwell Monningh • Ronald Moore • Oleksii Moroz • Denton Morris • Marty Murphy • Vladimir Nagaslaev • Frank Nagy • Jovan Nelson • Rich Neswold • Alexandr Netepenko • Duane Newhart • Dennis Nicklaus • John Nocita • Steve O'Day • Lola Ogunmefun • Michael Olander • Pat Oleksy Smith • Marv Olson • Seth Osher • Tom Owens • Suzanne Panacek • Vaia Papadimitriou • Andrii Pastushenko • James Patrick • William Pellico • Gilberto Perez • Bob Peters • David Peterson • Andrey Petrov • Luciano Piccoli • Milorad Popovic • Eric Prebys • Vahid Ranjbar • Ron Rechenmacher • Juan Reyna • Don Rohde • Jinhao Ruan • Nathan Ruffatti • Al Russell • Greg Saewert • Matthew Saewert • Floyd Sample • Shrividhyaa Sankar Raman • Robert Santucci • Carl Schumann • Brian Schupbach • Duncan Scott • Donna Siergiej • Lalitha Sista • Michael Sliczniak • David Slimmer • Jim Smedinghoff • Megan Smedinghoff • Scott Smedinghoff • Sandra Sommers • Al Sondgeroth • Robin Spayde • Pierpaolo Stabile • Giulio Stancari • Derek Steinkamp • Dean Still • Mel Storm • Bill Sullivan • Todd Sullivan • David Sutherland • Mary Sutherland • David Tabora • Cheng-Yang Tan • Congcong Tan • Dominic Tancredi • Frank Tecker • Al Thomas • Randy Thurman-Keup • Roger Tokarek • Donovan Tooke • Kent Triplett • Jeff Utterback • Alexander Valishev • David Vander Meulen • Philip Varghese • Duane Voy • Alex Waller • Weishi Wan • Junye Wang • Arden Warner • Therese Watts • Steve Werkema • Michael Wesley • Robert West • Chris Wilson • Lin Winterowd • Michael Wren • Aimin Xiao • Meiqin Xiao • Kevin Yacoben • Xuedao Yan • Ming-Jen Yang • Xi Yang • Jianming You • Zongwei Yuan • Jie Yun • Dehong Zhang • Fengxia Zhang • Xiaolong Zhang • Jijiu Zhao • Hai Zheng • Tim Zingelman



February new hires



Nilanjan Banerjee; Accelerator Research Division, Peoples Fellow



Christopher Valenzuela; Accelerator Operations Department

March work anniversaries

Determined from continuous work date

Maria Acosta Flechas (4)

Mitchell Adamus (42)

John Anderson III (9)

Colin Barrett (2)

David Bulmahn (38)

Alfonso Castillo Uribe (17)

James Clemons (27)

Robert Donahue (2)

Peter Drechsler (2)

Nathan Eddy (19)

Christopher Exline (33)

Brian Fellenz (39)

Shannon Fugman (19

Consolato Gattuso (33)

Eliana Gianfelice (18)

Jake Harper (3)

Todd Johnson (40)

David Kihlken (31)

Kenneth Klotz (3)

Mary Kohler (32)

Ioanis Kourbanis (33)

Sarah Lockwitz (11)

Elias Lopez (8)

Hannah Mills-Fee (1)

Charles Montiel (9)

Vladimir Nagaslaev (21)

Lucy Nobrega (25)

Igor Rakhno (23)

Ramfis Rivera-Colon (1)

KelliAnn Rubrecht (8)

Alexander Shemyakin (25)

Vladimir Shiltsev (27

Vladimir Sidorov (26)

Jay Tamburrino (4)

Randy Thurman-Keup (19)

Donovan Tooke (16)

Arden Warner (28)



The Beam Pulse wants your event photos!

Send pictures of what's happening to Alyssa Miller (<u>alyssa@fnal.gov</u>)

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