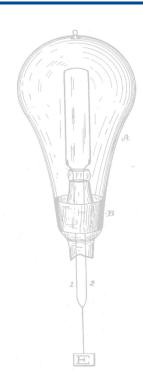
To honor Fermilab Inventors, Creators and Entrepreneurs

Annual Snventor Recognition Ceremony

Labwide Celebration

February 23, 2023 1:00 p.m. - 3:00 p.m.



Agenda

Welcome and 2022 Highlights

Cherri J. Schmidt

Head, Office of Partnerships and Technology Transfer

Message from the Director

Lia MermingaFermilab Director

Messages from the Department of Energy

Whitney Begner

Deputy Site Office Manager, FSO

Vanessa Chan

Chief Commercialization Officer, DOE Director, Office of Technology Transitions

Innovator Recognition and Awards Presentations

Institute of Electrical and Electronic Engineers Nuclear and Plasma Sciences Society

Alexander Romanenko

2022 Particle Accelerator Science and Technology Award
for outstanding contributions to science and technology of radio frequency
superconductivity for particle accelerators

Smithsonian STEM Exhibit - Women's Futures Month

Jessica Esquivel

#IfThenSheCan

featuring 120 life-size 3D statues of women who have excelled in the fields of science, technology, engineering and mathematics, or STEM

Breakthrough Prize Foundation

Anna Grassellino

New Horizons in Physics Prize

for her work and impact in particle accelerator technology and quantum information science and for the discovery of major performance enhancements to niobium superconducting radio-frequency cavities, with applications ranging from accelerator physics to quantum devices

2022 Patent Awardees

Michael Geelhoed

Water Purification System U.S. Patent #11,465,920, Issued October 11, 2022

Sam Posen Anna Grassellino Method for Treating Superconducting Cavities U.S. Patent #11,266,005, Issued March 1, 2022

Alexander Romanenko Sam Posen Anna Grassellino Methods and Systems for Treatment of Superconducting Materials to Improve Low Field Performance U.S. Patent #11,464,102, Issued October 4, 2022

Curtis Baffes

System for Sealing Flanged Connections U.S. Patent #11,353,450, Issued June 7, 2022

David Johnson Todd Johnson

Method and System for Arbitrary Optical Pulse Generation U.S. Patent #11,323,105, Issued May 3, 2022

Thomas Kroc

Permanent Magnet E-Beam/X-ray Horn U.S. Patent #11,291,104, Issued March 29, 2022

Robert Kephart Jayakar Charles Tobin Thangaraj Thomas Kroc SRF E-Beam Accelerator for Metal Additive Manufacturing U.S. Patent #11,224,918, Issued January 18, 2022

Jin-Yuan Wu

Gated Ring Oscillator with Constant Dynamic Power Consumption U.S. Patent #11,283,430, Issued March 22, 2022



2022 Invention and Software Disclosures

- Mustafa Bal
- Kurt Biery
- Vijay Chouhan
- Pengfei Ding
- Juan Vigil Estrada
- Eric Flumerfelt
- John Freeman
- Ivan Gonin
- Anna Grassellino
- Ben Hawks
- Matthew Hollister
- Glenn Johnson
- Vladimir Kashikhin
- Sergey Kazakov
- Wesley Ketchum
- Mohan Krishnamoorthy
- Thomas Kroc
- Sven Leyffer
- Gennadiy Lukhanin

- Guillermo Fernandez Moroni
- Stephen Mrenna
- Akshay Murthy
- Eric Neilsen, Jr.
- Tom Peterka
- Ronald Rechenmacher
- Patrick Riehecky
- Tim Ring
- Ryan Rivera
- Alexander Romanenko
- Daniel Schoo
- Gianni Tassotto
- Javier Tiffenberg
- Lorenzo Uplegger
- Changqing Wang
- Vyacheslav Yakovlev
- Orcun Yildiz
- Silvia Zorzetti

Technology Accelerating Science Award

Accelerator Controls Network (ACNET) Development Team

For sustained innovation in the development and deployment of technology that has enabled world class particle physics at Fermi National Accelerator Laboratory. This award recognizes the contributions of 190 authors over several decades to the Fermilab Accelerator Controls Network (ACNET), which includes:

Control System Front-End Software

Control System Central Services Software

Control System User Applications

ACNET Development Team Members

Michelle Leveling Nicholas Evans Phil Adamson Tony Leveling Denise Finstrom Seung-Chan Ahn Katie Leveling Alex Fishbeck Demetrius Andrews Clint Lewsader Martin Fitzgerald Gerald Annala Saul Lipton Robert Florian William Ashmanskas Joseph Longo Gary Ganster Omar Al Atassi Eugene Lorman Fernanda Garcia Mark Austin Boris Lublinsky Matthew Gardner Mike Backfish Ben Mack Gabriele Garzoglio

Charles Bacon

Consolato Gattuso

Vern Mandondji-Bangole

Consolato Gattuso

Debra Baddorf
Peter Bagley
Purnima Balakrishnan
Punnima Balakrishnan
Punnima Balakrishnan
Punnima Balakrishnan
Punnima Balakrishnan
Punnima Balakrishnan
Mariana Gonzalez
Barry Barnes
Bob Goodwin
Krish Gounder

Krish Gounder

Kevin Barson

Rethehebe Crossmen

Michele McCusker-Whiting

Steve Beck
Michael Begel
Chandra Bhat
Frank Bieniosek
Dixon Bogert

Bathsheba Grossman
Tom Groves
Jack Mealy
Marc Mengel
Marc Mengel
Geoff Mills
Frank Bieniosek
Bruce Hanna
Maxwell Monningh
Ronald Moore

Dixon Bogert Ronald Moore Elvin Harms Brian Bolek Oleksii Moroz Beau Harrison Timofei Bolshakov Denton Morris Kyle Hazelwood Andrew Braun Marty Murphy David Herrup Charlie Briegel Vladimir Nagaslaev Andy Hocker Daniel Broemmelsiek Jovan Nelson James A. Holt Jim Budlong Rich Neswold Caius Howcroft Kelly Cahill Alexandr Netepenko Jim Huang Jialing Cai Duane Newhart Iouri Ivanov

Jerry Cai Lola Ogunmefun Yuri Ivanov Linden Carmichael Mary Olson Gerry Jackson Lee Chapman Seth Osher Andreas Jansson Dinker Charak Suzanne Panacek Dave Johnson Salah Chaurize Vaia Papadimitriou Glenn Johnson Joe Compton Teresa Johnson Andrii Pastushenko Mary Convery Stan Johnson James Patrick Darren Crawford Gilberto Perez Valery Kapin

Edward Dambik Andrey Petrov Patrick Karns Kwasi Danquah Luciano Piccoli Guennadi Karpov Douglas Davis Rni Alves Pires Dale Keehan George Deinlein Milorad Popovic Terry Kiper Paul Derwent Eric Prebys Wally Kissel John Devoy Vahid Ranjbar Thomas Kobilarcik Jonathan Edelen Alexander Kulyavtzev Ron Rechenmacher

Dean Edstrom Nikolay Kuropatkin Juan Reyna
Joshua Einstein-Curtis Sharon Lackey Don Rohde
Keith Engell Valeri Lebedey Jinhao Ruan

Nathan Ruffatti Al Russell Greg Saewert Floyd Sample Shrividhyaa Sankar Raman

Carl Schumann
Duncan Scott
Donna Siergiej
Lalitha Sista
Megan Smedinghoff

Scott Smedinghoff Pat Oleksy Smith Sandra Sommers Robin Spayde Pierpaolo Stabile Giulio Stancari Derek Steinkamp Mel Storm Todd Sullivan
Bill Sullivan
Cheng-Yang Tan
Congcong Tan
Dominic Tancredi
Randy Thurman-Keup
Roger Tokarek
Donovan Tooke

Philip Varghese Weishi Wan Junye Wang Arden Warner Therese Watts Chris Wilson Lin Winterowd Guan Hong Wu

Kent Triplett

Jeff Utterback

Meiqin Xiao Aimin Xiao Xuedao Yan Ming-Jen Yang Xi Yang Jianming You Zongwei Yuan Jie Yun

Fengxia Zhang Xiaolong Zhang Dehong Zhang Jijiu Zhao Hai Zheng Tim Zingelman



Special Guest Dr. Vanessa Z. Chan

Dr. Vanessa Z. Chan is the Chief Commercialization Officer for the Department of Energy and Director of the Office of Technology Transitions.

She is an innovator who has worked across a wide range of ecosystems, from academia to Fortune 1000 companies to startups. She has two decades of experience helping organizations grow at the interface of technology and business, across a diverse set of industries.

The Office of Partnerships and Technology Transfer graciously thanks everyone who helped contribute to this year's event. Please contact OPTT@fnal.gov with your 2023 invention disclosures.