



CHIEF FINANCIAL OFFICER  
**JIMMY PATRONIS**  
STATE OF FLORIDA

To whom it may concern:

As the Chief Financial Officer of the State of Florida, it is my privilege to express support for Florida State University's request for Community Project Funding to create the FSU Quantum Communications Testbed. This ambitious project is not merely an investment in a state-of-the-art research facility but a commitment to secure Florida's position at the forefront of quantum research, economic development, and national security.

The Quantum Communications Testbed tackles challenges of utmost significance. Quantum communication technologies, especially in extreme environments, pose an array of obstacles that demand resolution for dependable and secure communication in national defense, space exploration, and global secure communication networks. The proposed testbed facility will methodically confront these challenges, capitalizing on the state's existing infrastructure, such as the Florida Center for Advanced Aero-Propulsion, the National High Magnetic Field Laboratory, and emerging cryogenic facilities, to establish an unparalleled multidisciplinary research platform in the Southeast.

The FSU Quantum Communications Testbed's objectives—to comprehend carrier photon behavior under extreme conditions, assess hardware performance, and stimulate innovation in quantum communication—are both audacious and crucial. The testbed's capacity to replicate a broad spectrum of environmental conditions will not only deepen our understanding of quantum communication but also catalyze significant technological progress. These advancements hold the promise of fortifying national security, boosting economic competitiveness through new industries and jobs, and preserving technological leadership on the global stage.

Furthermore, this project aligns impeccably with the strategic allocation of taxpayer dollars, offering substantial economic, strategic, educational, and scientific returns. The collaborative nature of the testbed facility will fortify cross-disciplinary research, augmenting the nation's scientific prowess and fostering innovation that could lead to breakthroughs in various fields beyond quantum communication.

Education and workforce development are components of this initiative. By providing hands-on experience with cutting-edge technologies, the project will prepare the next generation of scientists and engineers for the high-tech economy, addressing the need for a skilled workforce capable of sustaining technological leadership.

In conclusion, the FSU Quantum Communications Testbed is a visionary project representing a significant step forward in our collective quest for technological advancement and security. I wholeheartedly support this initiative and urge the consideration of FSU's CPF request. The benefits of this project extend well beyond the immediate research outcomes—it promises to secure our technological future, stimulate economic growth, and solidify our global leadership in quantum technologies.

Sincerely,

A handwritten signature in blue ink that reads "Jimmy Patronis".

Jimmy Patronis  
Chief Financial Officer



March 12, 2024

To whom it may concern,

I write in support of Florida State University's (FSU) Community Project Funding (CPF) request for the creation of the FSU Quantum Communications Testbed.

This adaptable testbed facility represents a forward-thinking approach to solving one of the most pressing challenges in quantum communication today. By systematically studying the effects of harsh environmental conditions, the initiative aims to pave the way for the deployment of quantum communication technologies in a wide range of applications, from global secure communication networks to space exploration.

Investment in technological advancements like resilient quantum communication systems would position FSU as a leader in this critical technology area, leading to economic growth through innovations and new industries throughout the region. This cutting-edge research facility would create educational opportunities for students and researchers, including hands-on experience with quantum technologies. This project will help train the next generation of scientists and engineers, equipping them with the skills needed in a high-tech economy.

The funding for this project would be a giant step forward for the state of Florida and set FSU apart from any other university in the southeast. I am very excited about the potential of this project and look forward to seeing it progress with the assistance of Community Project Funding.

Sincerely,

Warm regards,

James Taylor  
CEO  
Florida Technology Council



# THE FLORIDA SENATE

Tallahassee, Florida 32399-1100

## COMMITTEES:

Education Pre-K -12, *Chair*  
Agriculture  
Appropriations Committee on Education  
Appropriations Committee on Health  
and Human Services  
Education Postsecondary  
Fiscal Policy  
Rules

## JOINT COMMITTEE:

Joint Legislative Auditing Committee

## SENATOR COREY SIMON

3rd District

March 14, 2024

To whom it may concern,

I write in support of Florida State University's (FSU) Community Project Funding (CPF) request for the creation of the FSU Quantum Communications Testbed.

This adaptable testbed facility represents a forward-thinking approach to solving one of the most pressing challenges in quantum communication today. By systematically studying the effects of harsh environmental conditions, the initiative aims to pave the way for the deployment of quantum communication technologies in a wide range of applications, from global secure communication networks to space exploration.

Investment in technological advancements like resilient quantum communication systems would position FSU as a leader in this critical technology area, leading to economic growth through innovations and new industries throughout the region. This cutting-edge research facility would create educational opportunities for students and researchers, including hands-on experience with quantum technologies. This project will help train the next generation of scientists and engineers, equipping them with the skills needed in a high-tech economy.

The funding for this project would be a giant step forward for the state of Florida and set FSU apart from any other university in the southeast. I am very excited about the potential of this project and look forward to seeing it progress with the assistance of Community Project Funding.

Sincerely,

A handwritten signature in blue ink, appearing to read "Corey Simon", is written over a horizontal line.

Corey Simon  
State Senator  
District 3

□ 303 Senate Building, 404 South Monroe Street, Tallahassee, Florida 32399-1100 (850) 487-5003

KATHLEEN PASSIDOMO  
President of the Senate

DENNIS BAXLEY  
President Pro Tempore



# Florida House of Representatives

Representative Gallop Franklin II  
District 8

Committee:  
Education & Employment  
Select Committee on Hurricane Resiliency & Recovery

Subcommittees:  
Education Quality  
Health Care Regulation  
Higher Education Appropriations  
Insurance & Banking

March 14, 2024

The Honorable Daniel Webster  
Member of Congress  
United States House of Representatives  
2184 Rayburn HOB  
Washington, DC 20515

Dear Congressman Webster:

It is with great pleasure that I write in support of Florida State University's (FSU) Community Project Funding (CPF) request for the creation of the FSU Quantum Communications Testbed. Investment in technological advancements like resilient quantum communication systems would position FSU as a leader in this critical technology area, leading to economic growth through innovations and new industries throughout the region.

This adaptable testbed facility represents a forward-thinking approach to solving one of the most pressing challenges in quantum communication today. By systematically studying the effects of harsh environmental conditions, the initiative aims to pave the way for the deployment of quantum communication technologies in a wide range of applications, from global secure communication networks to space exploration.

This cutting-edge research facility would create educational opportunities for students and researchers, including hands-on experience with quantum technologies. This project will help train the next generation of scientists and engineers, equipping them with the skills needed in a high-tech economy.

The funding for this project would be a giant step forward for Florida and set FSU apart from other universities in the Southeast. I am very excited about the potential of this project and look forward to seeing it progress with the assistance of Community Project Funding.

Sincerely,

A handwritten signature in black ink that reads "Gallop Franklin II". The signature is written in a cursive, flowing style.

REP. GALLOP FRANKLIN  
Florida House of Representatives, House District 8

# Representative Taylor Yarkosky

## Florida House of Representatives

### District 25

**District Office:**  
16207 SR 50  
Suite 402  
Clermont, FL 34711  
(352) 404-0003

**Tallahassee Office:**  
1301 The Capitol  
402 South Monroe Street  
Tallahassee, FL 32399  
(850) 717-5025

Taylor.Yarkosky@MyFloridaHouse.Gov

February 26, 2024

To whom it may concern,

I write in support of Florida State University's (FSU) Community Project Funding (CPF) request for the creation of the FSU Quantum Communications Testbed.

This adaptable testbed facility represents a forward-thinking approach to solving one of the most pressing challenges in quantum communication today. By systematically studying the effects of harsh environmental conditions, the initiative aims to pave the way for the deployment of quantum communication technologies in a wide range of applications, from global secure communication networks to space exploration.

Investment in technological advancements like resilient quantum communication systems would position FSU as a leader in this critical technology area, leading to economic growth through innovations and new industries throughout the region. This cutting-edge research facility would create educational opportunities for students and researchers, including hands-on experience with quantum technologies. This project will help train the next generation of scientists and engineers, equipping them with the skills needed in a high-tech economy.

The funding for this project would be a giant step forward for the state of Florida and set FSU apart from any other university in the southeast. I am very excited about the potential of this project and look forward to seeing it progress with the assistance of Community Project Funding.

Respectfully,



Taylor Yarkosky  
State Representative, District 25

*Proudly Serving Lake County*

# Representative Taylor Yarkosky

## Florida House of Representatives

### District 25

**District Office:**

16207 SR 50  
Suite 402  
Clermont, FL 34711  
(352) 404-0003

**Tallahassee Office:**

1301 The Capitol  
402 South Monroe Street  
Tallahassee, FL 32399  
(850) 717-5025

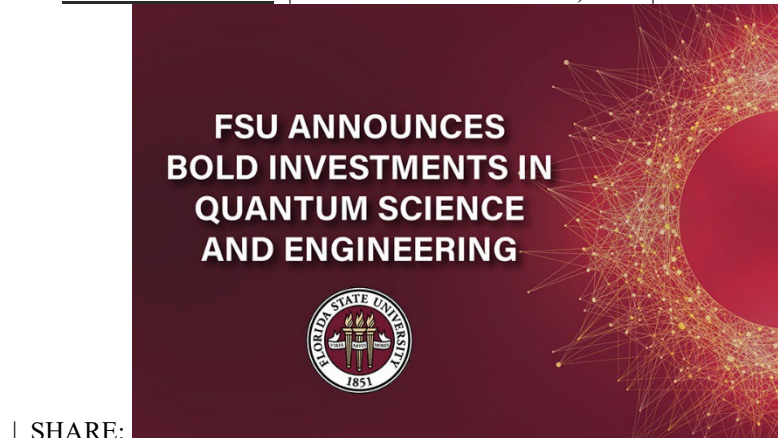
[Taylor.Yarkosky@MyFloridaHouse.Gov](mailto:Taylor.Yarkosky@MyFloridaHouse.Gov)

*Proudly Serving Lake County*



# FSU announces bold investments in quantum science and engineering

BY: BILL WELLOCK | PUBLISHED: APRIL 12, 2023 | 9:13 AM



| SHARE:

At the atomic and subatomic scales of matter, classical laws of nature lose control and quantum mechanics take over. Discoveries of new quantum phenomena and materials, such as quantum entanglement and topological systems, promise to deliver groundbreaking technologies. New extremely efficient quantum computers and communications and cryptography technologies are among a few of the future applications that could revolutionize the world.

Florida State University will dedicate more than \$20 million to quantum science and engineering over the next three years, funding that will support hiring at least eight new faculty members, equipment and dedicated space in the university's Interdisciplinary Research and Commercialization Building, and seed money for a new program focused on this emerging field. FSU President Richard McCullough announced the investments at the first day of the university's **Quantum Science and Engineering Symposium** last week.

"It's clear from the research being presented here that FSU is uniquely positioned to be a leader in what is now being heralded as the second quantum revolution," McCullough said. "We have the drive and the desire to expand our existing efforts so that we can be on the forefront of research in this area of critical national and global importance."

President for Research Stacey Patterson. "The university is committed to building on these programs by investing in the recruitment of top national talent who can complement existing expertise and open new opportunities for faculty and students."

The federal government has made expanding knowledge of quantum information science and developing new technologies a strategic priority. Agencies such as the National Science Foundation, Department of Defense, Department of Commerce, Department of Energy and others are part of the \$2.6 billion National Quantum Initiative.

FSU researchers are already part of the endeavor to explore quantum science and engineering. For example, Professor of Chemistry and Biochemistry Eugene DePrince is leading a **\$4.4 million Department of Energy (DOE) project** to help create software that can take advantage of supercomputer capabilities and advance quantum information science. FAMU-FSU College of Engineering Professor Wei Guo worked with DOE researchers to develop a new quantum bit platform, **research that was published in the journal Nature**. Professor of Physics Stephen Hill and Professor of Chemistry and Biochemistry Michael Shatruk are participants in a \$10 million multi-institutional Energy Frontier Research Center, also sponsored by DOE.

“College of Arts and Sciences faculty have a major role to play in FSU’s emerging quantum science focus, and we are enthusiastic partners in this exciting initiative,” said Sam Huckaba, dean of the College of Arts and Sciences. “In particular, our expertise in chemistry, computer science, and physics will anchor the university’s early participation, and other disciplines will join as these endeavors coalesce.”

Added Suvranu De, dean of the FAMU-FSU College of Engineering: “Engineering is the application of science to the solution of practical problems. Throughout history, engineers have pursued the most effective tools for resolving the challenges they encounter. Quantum science and technology signify a continuation of this extensive legacy. Researchers at the FAMU-FSU College of Engineering stand poised to participate in the problem-solving and technical innovation fostered by advancements in quantum science. The college takes great pride in bolstering the university’s initiatives in this rapidly emerging field.”

Professor of Chemistry and Biochemistry Eugene DePrince at the symposium. DePrince is leading a \$4.4 million Department of Energy project to help create software that can take advantage of supercomputer capabilities and advance quantum information science. (Bill Wellock/Florida State University)

Quantum engineering takes advantage of the principles of quantum mechanics to develop technologies beyond what is capable with classical physics. For example, quantum computers take advantage of the abilities of quantum bits to exist as 0 and 1 simultaneously until they are measured and to become connected in such a way that their properties become correlated, a phenomenon known as entanglement. Leveraging the unique properties of entangled states will allow quantum computers to solve problems that would take classical computers many years to calculate.

“In computing, cryptography, sensing and other technologies, quantum science and engineering is poised to make major breakthroughs possible,” Shatruk said. “Looking at the map of quantum science initiatives and centers across the nation, there is a huge gap in the Southeast. FSU’s administration making this investment is a bold step to make the university a major player in this area.”

Attendees at Florida State’s three-day Quantum Science and Engineering Symposium heard from nearly two dozen researchers from institutions such as Oak Ridge National Laboratory, Los Alamos National Laboratory, Amazon, Keysight Technologies, University of Florida, Georgia Tech, University of California Irvine, University of California Los Angeles and the FSU-headquartered National High Magnetic Field Laboratory about their latest research.



“The quality of presentations at the symposium was exceptional,” Hill said. “There was also plenty of time devoted to discussion, with the aim of informing strategies going forward that will ensure FSU cements its position as a leader in quantum science and engineering research and workforce education.”

Quantum materials are the latest example of humanity’s search to develop better materials that will impact society, said MagLab researcher Ryan Baumbach, who spoke about his research into uranium-based materials. Consider steel, a well-established technology that is still being pushed forward today by scientists. Without the steel beams that make high rises possible, modern cities would look very different and couldn’t be organized in the ways they are now.

“New materials have impacts on society that we don’t necessarily predict ahead of time,” he said. “It’s absolutely true that some of these materials we’re discussing here could be useful for quantum computing, quantum sensors or particle accelerators. We also have the chance to discover new things that we can’t anticipate and that may have very big impacts.”

Along with the possibilities for learning more about subatomic physics and chemistry, quantum science holds great opportunity for developing new technologies and partnering with industry. Representatives from Amazon and Keysight Technologies spoke about the work their companies are doing in this field.

“Florida State faculty continue to innovate across academic disciplines, and quantum science offers another opportunity for them to continue their world-class work,” Provost Jim Clark said. “FSU’s investment represents a commitment to advancing knowledge in this field, and I’m excited to see what our faculty will develop as they move forward.”

For more information and a complete list of speakers, **[visit the symposium website](#)**.

February 10, 2025

Congressman Webster,

I write in support of Florida State University's (FSU) Community Project Funding (CPF) request to fund Phase II of the FSU Quantum Communications Testbed.

This adaptable testbed facility represents a forward-thinking approach to solving one of the most pressing challenges in quantum communication today. By systematically studying the effects of harsh environmental conditions, the initiative aims to pave the way for the deployment of quantum communication technologies in a wide range of applications, from global secure communication networks to space exploration.

Investment in technological advancements like resilient quantum communication systems would position FSU as a leader in this critical technology area, leading to economic growth through innovations and new industries throughout the region. This cutting-edge research facility would create educational opportunities for students and researchers, including hands-on experience with quantum technologies. This project will help train the next generation of scientists and engineers, equipping them with the skills needed in a high-tech economy.

The funding for this project would be a giant step forward for the state of Florida and set FSU apart from any other university in the southeast. I am very excited about the potential of this project and look forward to seeing it progress with the assistance of Community Project Funding.

Sincerely,



Sue Dick  
President/CEO  
Greater Tallahassee Chamber of Commerce

EXECUTIVE COMMITTEE:

Sha'Ron James  
*Chair*

Eddie Gonzalez Loumiet  
*Chair-Elect*

Rob Clarke  
*Immediate Past Chair*

Richard Darabi  
*Treasurer*

Sue Dick  
*President/CEO*

Philip Browning

Russ Browning

Stuart Chandronnet

Andrew Gay

Ana Melendez

Erin Tilton

Denise Wilson