FINAL PRESS RELEASE PACKAGE

Toward a Unified Framework of Physics

Press release, publication details, author bios, figure caption, and submission-ready supporting materials

Research Article	Toward a Unified Framework of Physics: Insights from Dialectics, Quantum Theory, and Relativity
Authors	Tracy Klein and Emmanuel Igumbor
Journal	International Journal of Quantum Foundations
Publication Date	June 6, 2026

Prepared for academic and media dissemination

Package Overview

This package is designed to support direct academic outreach, university communications review, and submission to suitable research news platforms or newsletters.

- Final press release with publication date, cautious scientific positioning, and media contact fields.
- Publication information for quick verification by editors, platforms, and communications offices.
- Author bios suitable for press release use and outreach materials.
- Conceptual figure and caption for use alongside the release when appropriate.
- Submission notes and a forwarding message for a university communications office.

Recommended Use

1. Before submission, replace bracketed placeholders such as city and release date.
2. If using a university route, have the co-author forward the package to the university communications office for review and possible institutional submission.
3. If submitting directly to a platform or newsletter, use the final press release and include the article link, figure, author bios, and media contact information.
4. Do not guarantee media coverage or platform acceptance. This package is prepared to support professional outreach and review.

Final Press Release

FOR IMMEDIATE RELEASE | [Insert Release Date]

New Dialectical Framework Offers a Fresh Perspective on Quantum Measurement and Relativity

Theoretical study proposes an interdisciplinary conceptual approach to understanding quantum states, entanglement, time, and spacetime

[City, State] - [Release Date] - A newly published theoretical study introduces a dialectical framework for interpreting quantum mechanics, proposing that quantum states, measurement, entanglement, and relativity may be understood as interdependent components of a unified conceptual system. Published online on June 6, 2026 in the International Journal of Quantum Foundations, the work offers a new perspective on longstanding questions surrounding quantum superposition, observation, and the nature of time.

Rather than presenting an alternative mathematical formulation of quantum mechanics, the study explores whether principles of dialectical reasoning - traditionally associated with the interaction of complementary or opposing states - can provide a conceptual framework for interpreting quantum phenomena and their relationship to spacetime.

The authors present the framework as a conceptual interpretation intended to encourage discussion within quantum foundations, not as an experimentally established mechanism or a final resolution of open questions in quantum physics.

“The scientific framework guides research by providing the structural foundation for empirical facts and interpreting observations, ensuring that new data builds cohesively upon established knowledge,” said Tracy Klein, co-author of the paper.

A Conceptual Framework Based on Interdependence

The central idea of the proposed framework is that seemingly distinct physical states may be viewed as mutually dependent components of a larger system rather than isolated entities. From this perspective, the properties and behavior of individual states emerge through their relationships with one another and with the system as a whole.

To illustrate this principle, the framework considers complementary physical relationships, such as particle-antiparticle pairs, as examples of interdependent components whose interactions contribute to the behavior of larger physical systems. This dialectical perspective serves as a basis for interpreting quantum states, measurement, and entanglement.

Accordingly, the study proposes that:

- quantum states may be interpreted as interconnected components of a larger continuum rather than completely independent possibilities;
- superposition may be understood as a description of the system prior to selecting a specific spacetime reference;
- the evolution of a quantum state may be viewed as relational, depending on its interactions with other states and with the system as a whole; and

- quantum entanglement may be viewed conceptually as an expression of this underlying interdependence.

Reconsidering Observation and Measurement

The framework further proposes that a quantum system in superposition may be interpreted as existing independently of any particular spacetime reference. From this viewpoint, when a quantum state is observed or measured, relativity - referring to the specific point in space and time from which the observation or measurement occurs - is introduced and becomes entangled with the quantum system within the authors' conceptual framework.

Rather than describing measurement as a proven physical mechanism of collapse, the framework interprets observation as the selection of a particular spacetime context within an interconnected continuum of potential states. This perspective is offered as a theoretical interpretation designed to encourage alternative ways of thinking about the relationship between quantum measurement and relativity.

Extending the Perspective to Space and Time

The same dialectical principle is applied to relativity by viewing space and time as complementary dimensions that together define the continuum of spacetime.

Building on this idea, the study discusses theoretical work suggesting that time may exhibit bidirectional characteristics in certain contexts. Within the proposed framework, the transaction and synthesis between past and future states are conceptually described as creating present time and, more broadly, one whole interconnected continuum of time.

Rather than presenting this as a settled physical result, the study frames the idea as a conceptual extension of the paper's broader theme: that physical descriptions may be understood through relationships among parts and wholes.

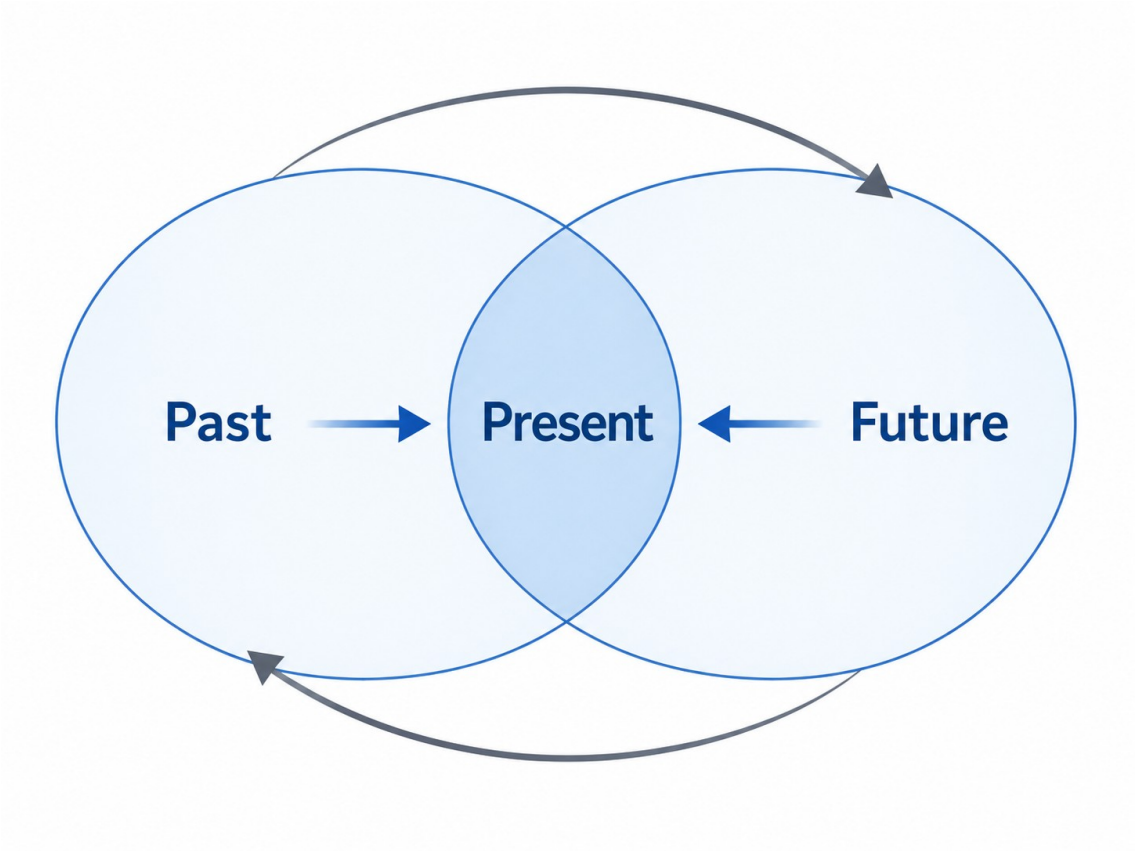


Figure 1. Conceptual illustration of a dialectical interpretation of time, in which the bidirectional transaction and synthesis between past and future states are represented as giving rise to present time within one whole interconnected continuum of time. The figure is intended as a conceptual visualization and does not represent an experimentally verified physical process.

Broader Implications

The authors suggest that a dialectical framework may provide a useful conceptual bridge for exploring relationships between quantum mechanics and relativity, two foundational theories that describe nature from different perspectives.

While the framework does not claim to resolve outstanding questions in quantum physics or provide experimental verification, it aims to contribute a coherent conceptual model that encourages interdisciplinary dialogue among physicists, philosophers of science, and researchers interested in quantum foundations.

Why This Research Matters

Quantum measurement, superposition, entanglement, and the relationship between quantum mechanics and relativity remain among the most actively discussed topics in modern physics.

By introducing a dialectical perspective centered on interdependence rather than isolated states, this study offers a conceptual approach that may stimulate further research and discussion across theoretical physics, philosophy of science, and quantum foundations.

The work invites researchers to examine whether dialectical reasoning can serve as a complementary interpretive framework alongside existing approaches to understanding quantum phenomena.

Publication Information

Journal	International Journal of Quantum Foundations
Article	Toward a Unified Framework of Physics: Insights from Dialectics, Quantum Theory, and Relativity
Authors	Tracy Klein and Emmanuel Igumbor
Article Link	https://ijqf.org/archives/7702
Publication Date	June 6, 2026

Media Contact

Name	Tracy Klein
Email	Tracyklein1122@gmail.com
Phone	Available upon request
Article Page	https://ijqf.org/archives/7702
Co-author Contact	Dr. Emmanuel Igumbor - Elgumuk@gmail.com

Author Bios

Tracy Klein is an independent researcher whose work explores the application of dialectical reasoning to quantum theory, measurement, entanglement, time, and relativity. Drawing on more than 15 years of training and practice in dialectical behavior therapy, she has spent the past decade developing an interdisciplinary framework for examining how opposing or complementary states may function as parts of larger interconnected systems. Her research focuses on bridging concepts from dialectics, philosophy of science, and quantum foundations to offer new ways of interpreting complex theoretical questions.

Co-author Bio

Dr. Emmanuel Igumbor is a Computational Physicist and Materials Scientist with over 15 years of experience in computational materials science, computational fluid dynamics (CFD), and high-performance scientific computing. His research combines first-principles density functional theory (DFT), hybrid functional methods, multiphysics simulations, and data-driven computational techniques to address challenges in advanced materials, semiconductor devices, nuclear engineering, and fluid dynamics.

He currently serves as Research Coordinator in the Department of Mechanical Engineering Science at the University of Johannesburg, where he leads multidisciplinary research in semiconductor defect engineering, CFD for nuclear reactor systems, infectious aerosol transport, greenhouse environmental control, mineral processing, and thermal-fluid analysis for the ATLAS Inner Tracker at CERN. His work bridges fundamental physics with industrial engineering applications, supporting the development of next-generation electronic, energy, and environmental technologies.

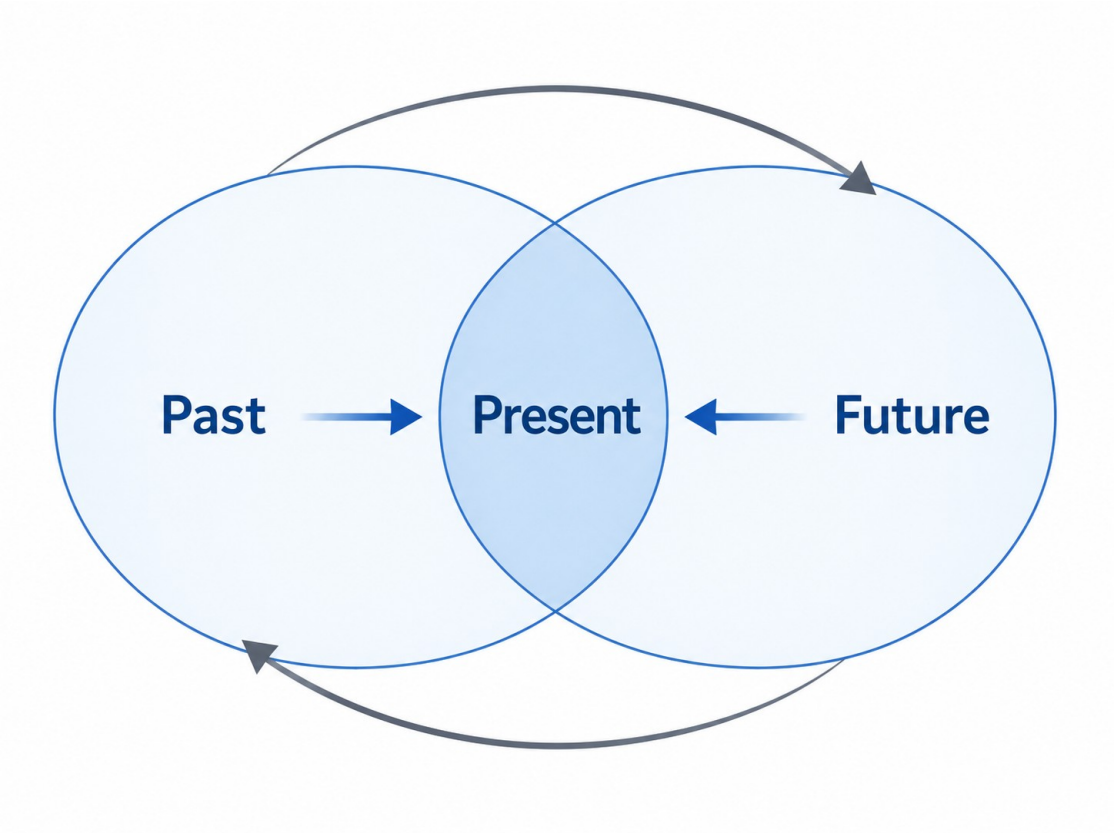
Dr. Igumbor has published more than 50 peer-reviewed journal articles and conference papers and has presented his research at leading international conferences across Africa, Europe, North America, and Asia. He has supervised undergraduate and postgraduate research projects, secured competitive research fellowships and travel grants, and contributes to the scientific community as an NRF grant reviewer, reviewer for numerous high-impact international journals, conference session chair, postgraduate examiner, and mentor.

His technical expertise includes Density Functional Theory, Computational Fluid Dynamics (ANSYS Fluent), high-performance computing (HPC), Python, C++, Fortran, Linux, MPI/OpenMPI, VASP, Quantum ESPRESSO, Materials Studio, MATLAB, and machine learning for scientific applications.

His research interests encompass semiconductor defect physics, two-dimensional materials, computational materials discovery, nuclear engineering simulations, multiphysics modelling, digital engineering, artificial intelligence for scientific computing, and advanced energy materials. His long-term research vision is to develop predictive computational methodologies that accelerate the design and optimisation of materials and engineering systems for sustainable energy, quantum technologies, advanced manufacturing, and next-generation electronic devices.

Co-author email: Elgumuk@gmail.com

Figure Asset and Caption



Caption: Conceptual illustration of a dialectical interpretation of time, in which the bidirectional transaction and synthesis between past and future states are represented as giving rise to present time within one whole interconnected continuum of time. The figure is intended as a conceptual visualization and does not represent an experimentally verified physical process.

Usage note: Include the figure only when the platform accepts images or when it helps clarify the conceptual discussion. The caption should remain attached to avoid overstating the figure as experimental evidence.

University Communications Submission Route

If the co-author's university communications office is willing to support the release, that may be the strongest route for platforms such as EurekAlert! or AlphaGalileo. A university communications office can review the release, align it with institutional style, add an official media contact if appropriate, and decide whether the work fits its submission criteria.

Suggested Forwarding Message

Dear [Name],

I am sharing a press release package for a recently published paper in the International Journal of Quantum Foundations, titled "Toward a Unified Framework of Physics: Insights from Dialectics, Quantum Theory, and Relativity." The article was published online on June 6, 2026.

The package includes the final press release, publication details, author bios, figure caption, article link, and media contact information. We would appreciate your review and guidance on whether the university communications office may be able to support dissemination or submission through appropriate academic news channels.

Thank you for your time and consideration.

Best regards,
Tracy Klein
Tracyklein1122@gmail.com

Submission Checklist

- Final press release DOCX and PDF
- Published article link: https://ijqf.org/archives/7702
- Author bios
- Conceptual figure and caption
- Preferred media contact email: Tracyklein1122@gmail.com
- Release date and city/state placeholders completed before public submission
- Co-author and/or university communications approval if using institutional channels

Positioning Guardrails

- Use "conceptual framework" and "theoretical interpretation" rather than claiming experimental proof.
- Avoid saying the paper solves the measurement problem or proves a unified theory.
- Present the work as a contribution to discussion in quantum foundations and philosophy of science.
- Keep the figure caption attached wherever the image is used.