STDG

Open Science Infrastructure, Scientific Dissemination and Independent Discovery

Six-Throat Directed Geometry

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Research Program: Six-Throat Directed Geometry (STDG)
Primary Repository: Zenodo
Research Community: stdg-ibrahim-mussa
Reference Baseline: 28 November 2026

Executive Summary

Six-Throat Directed Geometry (STDG) is an independent scientific research program developed through cumulative mathematical formulation, physical modeling, computational investigation, and open scientific publication.

The program connects research across cosmology, spacetime geometry, gravitational dynamics, quantum mechanics, directed physical processes, and prospective technological applications.

Its dissemination architecture is founded on open access, persistent digital identification, computational reproducibility, structured scholarly metadata, and independent scientific discovery.

As of 28 November 2026, the program comprised 40 published research works on Zenodo, recording 2,250 total views and 704 total downloads.

The initial external indexing inventory also recorded eight discovery pages representing six distinct research works across two external scientific platforms: Aqora and Synapse Social.

This document establishes the organizational framework through which STDG develops its scientific presence, maintains its publication standards, monitors its dissemination, and expands its accessibility to the international research community.

1. Foundation and Scientific Independence

The development of STDG began under challenging publication conditions. Early manuscript submissions encountered rejection, including restrictions on subsequent resubmission.

Rather than discontinuing the research program, I proceeded through an independent publication pathway based on cumulative scientific development and open access.

The objective was to construct a coherent body of research whose mathematical definitions, physical mechanisms, computational procedures, and scientific relationships remained accessible for examination.

Zenodo became the primary repository for this developing research architecture.

Through continuous publication, the original investigation developed into a series of interconnected scientific works, establishing a permanent digital record of the program's development.

Scientific progress within STDG is sustained through research continuity, mathematical consistency, reproducibility, and accessibility.

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2. The Cumulative Research Architecture

STDG is organized as an interconnected scientific research program in which individual papers address defined mathematical, physical, or technological problems while maintaining their relationships with the foundational architecture.

Its principal research domains include:

- Regular six-throat spacetime geometry.
- Singularity-free cosmological constructions.
- Directed gravitational and optical transport.
- The Great Attractor and the Great Merger M1.
- Matter and antimatter.
- Directed quantum mechanics and quantum-field structures.
- Stellar and galactic processes.
- Directed photon histories and observational reconstruction.
- Terrestrial physical processes.
- Energy and directed technological applications.

Each published work provides an independent point of scientific discovery while contributing to the broader research program.

The diversity of these research domains creates multiple pathways through which researchers may encounter STDG according to their individual scientific interests.

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3. Open Science Infrastructure

The dissemination of STDG extends beyond the direct publication of individual manuscripts.

Through persistent identifiers and standardized metadata, published research becomes part of the international scholarly information infrastructure.

The principal components of this architecture are:

Research publication:
Zenodo provides the primary repository for manuscripts, computational packages, and associated research materials.

Persistent identification:
Digital Object Identifiers (DOIs) provide stable references to published research records and their versions.

Author identification:
ORCID provides a persistent identifier connecting research outputs to their author.

Metadata dissemination:
Structured metadata can be accessed and harvested through established protocols, including the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH).

Scientific discovery:
Scholarly databases, indexing services, research platforms, and search engines can incorporate these records into their discovery systems.

The resulting architecture supports scientific accessibility beyond the original publication platform.

4. Independent Scientific Indexing

The initial external indexing observations of November 2026 identified STDG research records on Aqora and Synapse Social.

These discovery pathways emerged without direct submissions by the author to those platforms or dedicated advertising expenditures for their indexing.

The initial inventory recorded:

External platform	Indexed papers
Aqora	XXI, XXII, XXIII, XXIV, XXVIII, XXX
Synapse Social	XXI, XXII
External discovery pages	8
Distinct research works	6

This inventory constitutes the initial reference for monitoring the expansion of external scientific discovery.

Future monitoring includes OpenAlex, OpenAIRE, Google Scholar, Semantic Scholar, and additional scholarly discovery services.

Each recorded appearance is associated with its original DOI, external page address, and verification date.

External indexing provides additional scientific discovery pathways while preserving the original publication record.

5. Standardized Publication Framework

All future STDG publications shall maintain a consistent scientific identity and structured publication metadata.

Metadata field	Adopted standard
Author	Ibrahim Mohammed Mussa
ORCID	0009-0006-5509-0500
Research program	Six-Throat Directed Geometry
Abbreviation	STDG
Repository	Zenodo
Community	stdg-ibrahim-mussa
Publication language	English
Paper numbering	Roman numerals
Keywords	Program identity and domain-specific scientific terminology
Related identifiers	Relevant published DOI references
Reproducibility	Associated computational and research packages

Related identifiers shall represent the actual scientific relationships between published works, including mathematical inheritance, methodological continuity, and research dependencies.

Publication versioning, scientific attribution, and licensing shall remain consistent with the approved publication record.

6. Scientific Reproducibility

Reproducibility constitutes a central component of the STDG publication framework.

Where applicable, research publications are accompanied by materials supporting independent mathematical and computational examination, including:

- Mathematical derivations and numerical formulations.
- Computational source code.
- Numerical datasets and diagnostic outputs.
- Verification procedures.
- Reproducibility instructions.
- File-integrity information.

Scientific manuscripts and technical reproduction records retain their respective functions.

Mathematical results, computational verification, and empirical observations are distinguished according to their scientific nature.

This organization provides researchers with access to both the published scientific construction and the materials necessary to examine its computational implementation.

7. Scientific Reach Observatory

The STDG Scientific Reach Observatory establishes a systematic framework for monitoring the development of the program's scientific and public accessibility.

The observatory operates across five complementary dimensions.

7.1 Research Reach

Monitoring repository views, downloads, publication records, and the distribution of interest across research domains.

7.2 Dissemination Dynamics

Measuring weekly growth, publication-age-normalized download rates, and changes in research accessibility over time.

7.3 External Scientific Indexing

Documenting newly identified scholarly platforms, indexed works, external discovery records, and their connections to original DOI references.

7.4 Academic Circulation

Monitoring external scholarly citations, scientific references, and documented research discussions.

7.5 Scientific Media Dissemination

Evaluating the relationship between public scientific communication, documentary films, short-form educational content, promotional campaigns, and research accessibility.

Each periodic report follows three consecutive stages:

Results → Practical Implications → Executive Recommendations

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8. Foundational Dissemination Baseline

Reference date: 28 November 2026

Indicator	Recorded value
Published research works	40
Total repository views	2,250
Total repository downloads	704
Unique view events	2,022
Unique download events	675
Download-to-view ratio	31.29%
Initially recorded external platforms	2
External discovery pages	8
Distinct externally indexed works	6

The repository figures are based on cumulative all-version statistics, with each distinct research work counted once.

The download-to-view ratio is defined as total recorded downloads divided by total recorded views.

This baseline provides a fixed historical reference for subsequent periodic comparisons and dissemination-growth assessments.

9. Scientific Communication and Public Engagement

Scientific communication extends the accessibility of STDG beyond specialized repository environments.

Documentary films, scientific trailers, short-form videos, visual explanations, and public research announcements provide complementary pathways through which broader audiences may encounter the program.

Each media production shall maintain a direct relationship with its corresponding published research through accurate titles, scientific terminology, author attribution, and DOI references.

The primary objective of scientific media dissemination is to transform public curiosity into sustained engagement with scientific research.

Media visibility serves research accessibility rather than replacing mathematical examination, physical investigation, or scientific evaluation.

10. Independent Digital Presence

The long-term dissemination architecture of STDG incorporates the development of an independent scientific website connecting published research, reproducibility materials, documentary productions, and program announcements.

The website is intended to provide a unified discovery portal while preserving Zenodo as the primary repository for published scientific records.

Its planned functions include:

- A structured catalog of STDG publications.
- Direct access to original DOI records.
- Research-domain navigation.
- Scientific films and educational material.
- Research announcements and publication updates.
- Voluntary subscription to scientific communications.
- Periodic scientific dissemination reports.

Social media platforms provide additional discovery pathways, while the independent website supports continuity of access and communication.

11. Long-Term Scientific Objectives

The long-term dissemination objectives of STDG are to strengthen:

- Permanent accessibility of published research.
- Consistent scientific attribution and identification.
- Mathematical and computational reproducibility.
- Independent scholarly discovery.
- International scientific communication.

- Research continuity across successive publications.
- Evidence-based evaluation of scientific dissemination.

The expansion of the research program shall remain grounded in cumulative scientific development, supported by an open and interconnected publication infrastructure.

Conclusion

Six-Throat Directed Geometry has developed from an initial independent scientific investigation into an interconnected research program supported by open publication, persistent digital identifiers, reproducibility materials, and multiple pathways of scientific discovery.

Every published research work contributes both to the scientific architecture of the program and to its accessibility within the broader scholarly information network.

The integration of standardized publication practices, independent scientific indexing, systematic dissemination monitoring, and public scientific communication establishes a durable organizational framework for the continued development of STDG.

The program's guiding principle is sustained scientific construction through continuity, accessibility, reproducibility, and independent examination.

Research Access and Infrastructure References

Author ORCID
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STDG Research Community
https://zenodo.org/communities/stdg-ibrahim-mussa

Zenodo Repository Infrastructure
https://developers.zenodo.org/

Zenodo Principles
https://about.zenodo.org/principles/

DataCite Metadata Harvesting
https://support.datacite.org/docs/harvesting-datacite-doi-metadata

OpenAlex Scholarly Data Infrastructure
https://help.openalex.org/data/

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