

# Dark Matter Core Structure in AS1063: Evidence Synthesis

Thread: cosmos Source digest: /cohera/cosmos/digests/auto-the-large-cores-of-dark-matter  
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## Abstract

This paper presents a structured synthesis of current cosmos evidence around dark matter core structure in as1063: evidence synthesis. It consolidates the ongoing research pipeline into a publication-ready narrative with explicit validation constraints, claim-to-evidence continuity, and next-step falsification criteria.

## Keywords

dark matter, globular clusters, as1063, cosmology

## Background and Motivation

Autodraft · The large cores of dark matter and globular clusters in AS1063 Possible evidence of self-interacting dark matter Or not · Cohera Lab Cohera Lab Home Research Cosmos Regenesis Ethos Publications About Autodraft: The large cores of dark matter and globular clusters in AS1063 Possible evidence of self-interacting dark matter Or not Date: 2026-02-23 · Thread: cosmos · Status: extracted-draft · Confidence: low-medium Source chatgpt/pdf/The\_large\_cores\_of\_dark\_matter\_interacting\_dark\_matter\_Or\_not.pdf DOI: not detected automatically. Auto summary (preview-based) Astronomy & Astrophysics manuscript no. AA\_main February 19, 2026 ©ESO 2026 The large cores of dark matter and globular clusters in AS1063. Possible evidence of self-interacting dark matter. Or not. J.M. Diego1,\* Instituto de Física de Cantabria (CSIC-UC). Avda. Los Castros s/n. 39005 Santander, Spain arXiv:2602.15940v1 [astro-ph.GA] 17 Feb 2026 February 19, 2026 ABSTRACT Deep JWST images of AS1063 reveals tens of th Key findings (auto-extracted) Primary topic appears to center on: large, cores, dark, matter. Source was auto-indexed and text-previewed for rapid

## Core Claims and Evidence Continuity

triage. Needs manual verification before promoting any strong claim to high confidence. Evidence & citations Source file: chatgpt/pdf/The\_large\_cores\_of\_dark\_matter\_and\_globular\_clusters\_in\_AS1063\_interacting\_dark\_matter\_Or\_not.pdf Extraction scope: 1-2 Abstract/preview extracted automatically. Claim → evidence mapping (auto) Claim: AA\_main February 19, 2026 ©ESO 2026 The large cores of dark matter and globular clusters in AS1063. Evidence quote: "AA\_main February 19, 2026 ©ESO 2026 The large cores of dark matter and globular clusters in AS1063." Page hint: 1-2 Claim: 39005 Santander, Spain arXiv:2602.15940v1 [astro-ph.GA] 17 Feb 2026 February 19, 2026 ABSTRACT Deep JWST images of AS1063 reveals tens of thousands of globular clusters in the gala... Evidence quote: "39005 Santander, Spain arXiv:2602.15940v1 [astro-ph.GA] 17 Feb 2026 February 19, 2026 ABSTRACT Deep JWST images of AS1063 reveals tens of thousands of globular clusters in the galaxy cluster AS1063." Page hint: 1-2 Claim: When compared with the lensing model based on the same JWST data, the distribution of globular clusters traces closely the distribution of lensing mass (mostly composed of dark mat... Evidence quote: "When compared with the lensing model based on the same JWST data, the distribution of globular clusters traces closely the distribution of lensing mass (mostly composed of dark m

## Validation / Falsification Checklist

- Re-check all central claims against primary sources and DOI-linked material.

- Mark confidence per claim and separate inference from evidence.
- Require at least one independent corroborating source before final publication promotion.

## **Operational Next Steps**

atter)." Page hint: 1-2 Falsification / validation checklist Re-read full source and verify the central claim sentence-by-sentence. Cross-check against at least one independent source before promotion. Keep confidence at low-medium until replication or corroboration is explicit. Next queries What is the smallest testable claim from this source?