

# Prof. AHMET MECİT ÖZTAŞ

## Personal Information

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## International Researcher IDs

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Publons / Web Of Science ResearcherID: O-1718-2018

ScopusID: 10638898900

Yoksis Researcher ID: 105350

## Education Information

Doctorate, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1986 - 1991

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Fizik (Dr), Turkey 1983 - 1985

Undergraduate, Ankara University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1979 - 1983

## Foreign Languages

English, B2 Upper Intermediate

## Research Areas

Natural Sciences

## Academic Titles / Tasks

Professor, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2021 - Continues

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2007 - Continues

Assistant Professor, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 1993 - 2007

## Published journal articles indexed by SCI, SSCI, and AHCI

- Re-evaluation of  $\Omega_m$  of the normalised Friedmann-Lemaitre-Robertson-Walker model: Implications for Hubble constant determinations**  
ÖZTAŞ A. M., Smith M. L.  
NEW ASTRONOMY, vol.88, 2021 (SCI-Expanded)
- Cosmic future of universe inferred from the horizon behaviours in Lambda proportional to  $a^{-2}$ , Lambda proportional to  $H^{-2}$ , Lambda proportional to  $\rho$  cosmological constant models**  
ÖZTAŞ A. M., Dil E., Tufekci O.  
JOURNAL OF ASTROPHYSICS AND ASTRONOMY, vol.42, no.2, 2021 (SCI-Expanded)

- III. **Entropic source of cosmological constant and implications: Generalization to higher dimensions**  
ÖZTAŞ A. M., Dil E.  
PHYSICS OF THE DARK UNIVERSE, vol.31, 2021 (SCI-Expanded)
- IV. **Testing adiabatic expansion of polytropic universe model with SNe Ia data**  
Dil E., ÖZTAŞ A. M., Dil E.  
PHYSICA SCRIPTA, vol.95, no.6, 2020 (SCI-Expanded)
- V. **The varying cosmological constant models tested with Supernovae Type Ia and HII Galaxy Data**  
Dil E., ÖZTAŞ A. M., Dil E.  
ASTRONOMY AND COMPUTING, vol.28, 2019 (SCI-Expanded)
- VI. **The effects of a varying cosmological constant on the particle horizon**  
ÖZTAŞ A. M.  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.481, no.2, pp.2228-2234, 2018 (SCI-Expanded)
- VII. **The varying cosmological constant: a new approximation to the Friedmann equations and universe model**  
ÖZTAŞ A. M., Dil E., Smith M. L.  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.476, no.1, pp.451-458, 2018 (SCI-Expanded)
- VIII. **Space-time curvature and the cosmic horizon: derivations using the Newtonian world and the Friedmann-Robertson-Walker metric**  
ÖZTAŞ A. M., Smith M. L.  
MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY, vol.449, no.2, pp.1270-1274, 2015 (SCI-Expanded)
- IX. **The Cosmological Constant Constrained with Union2.1 Supernovae Type Ia Data Derivation and Evaluation of Several FRW and Carmeli Models Presenting Underwhelming Support for the Standard Model**  
ÖZTAŞ A. M., Smith M. L.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.53, no.8, pp.2636-2661, 2014 (SCI-Expanded)
- X. **Is the possible fine-structure constant drift also a test of a time-dependent Planck constant?**  
ÖZTAŞ A. M., Smith M. L.  
SCIENCE CHINA-PHYSICS MECHANICS & ASTRONOMY, vol.54, no.12, pp.2191-2195, 2011 (SCI-Expanded)
- XI. **CONSTRAINTS ON DARK ENERGY AND DARK MATTER FROM SUPERNOVAE AND GAMMA RAY BURST DATA**  
Smith M. L., Sekaran B., ÖZTAŞ A. M., Paul J.  
DARK ENERGY: THEORIES, DEVELOPMENTS AND IMPLICATIONS, pp.111-126, 2010 (SCI-Expanded)
- XII. **Spacetime curvature is important for cosmology constrained with supernova emissions**  
Oeztas A. M., Smith M. L., Paul J.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.47, no.9, pp.2464-2478, 2008 (SCI-Expanded)
- XIII. **Elliptical solutions to the standard cosmology model with realistic values of matter density**  
Oztas A. M., Smith M. L.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.45, no.5, pp.925-936, 2006 (SCI-Expanded)
- XIV. **A model of light from ancient blue emissions**  
Smith M. L., Oztas A. M., Paul J.  
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS, vol.45, no.5, pp.937-952, 2006 (SCI-Expanded)
- XV. **Condition for gapless color-antitriplet excitations in Nambu-Jona-Lasinio models**  
Sandin F., Oztas A. M.  
PHYSICAL REVIEW C, vol.73, no.3, 2006 (SCI-Expanded)
- XVI. **Phase diagram of three-flavor quark matter under compact star constraints**  
Blaschke D., Fredriksson S., Grigorian H., Oztas A. M., Sandin F.  
PHYSICAL REVIEW D, vol.72, no.6, 2005 (SCI-Expanded)
- XVII. **Diquark condensation effects on hot quark star configurations**  
Blaschke D., Fredriksson S., Grigorian H., Oztas A. M.  
NUCLEAR PHYSICS A, vol.736, pp.203-219, 2004 (SCI-Expanded)
- XVIII. **The low-temperature phase of the Heisenberg antiferromagnet in a fermionic representation**

Azakov S., Dilaver M., Oztas A. M.

INTERNATIONAL JOURNAL OF MODERN PHYSICS B, vol.14, no.1, pp.13-28, 2000 (SCI-Expanded)

**XIX. PHASE-TRANSITION IN FINITE-TEMPERATURE STRING THEORIES**

OZTAS A. M., GUNDUC Y., CELIK T.

ZEITSCHRIFT FUR PHYSIK C-PARTICLES AND FIELDS, vol.63, no.4, pp.655-657, 1994 (SCI-Expanded)

## Articles Published in Other Journals

**I. Epochs of discontinuity for the standard model of cosmology with supernovae observational data**

Smith M. L., ÖZTAŞ A. M.

Advanced Studies in Theoretical Physics, vol.2, no.1, pp.1-10, 2008 (Scopus)

**II. Estimation of redshifts from early galaxies**

Smith M. L., ÖZTAŞ A. M., Paul J.

Annales de la Fondation Louis de Broglie, vol.32, no.1, pp.61-67, 2007 (Scopus)

## Books & Book Chapters

**I. Constraints on Dark Energy and Dark Matter from Supernovae and Gamma Ray Burst Data**

SMITH M., SAKARAN B., ÖZTAŞ A. M., PAUL J.

in: DARK ENERGY THEORIES DEVELOPMENTS AND IMPLICATIONS, KARL LEFEBVRE, RAOUL GARCIA, Editor, NOVA Science Publishers, Inc., New-York, pp.111-126, 2011

**II. A Polytropic Solution of the Expanding Universe – Constraining Relativistic and Non-Relativistic Matter Densities Using Astronomical Results**

ÖZTAŞ A. M., ML S.

in: Aspects of Today's Cosmology, Antonio Alfonso-Faus, Editor, IN TECH, Rijeka, pp.285-304, 2010

## Metrics

Publication: 23

Citation (WoS): 255

Citation (Scopus): 239

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