

# CURRICULUM VITAE

## Aristides I. Kechriniotis

**Position:** Visiting lecturer, Department of Physics, University of Thessaly,  
35100 Lamia, Greece

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**Google scholar profile:** <https://scholar.google.com/citations?user=qN-JBwYAAAAJ&hl=en>

### Education:

1975 Degree in Mathematics, University of Patras, Greece

2002 PhD, General Department, University of Patras  
PhD title: "Study of material electromagnetic properties through Dirac Equation"

### Professional experience:

10/2019-today Visiting lecturer, Department of Physics, University of Thessaly,  
Greece

2/2019-9/2019 Visiting lecturer, General Department of Lamia, University of  
Thessaly, Greece

2002-2019 Visiting lecturer, Technological Education Institute of Lamia and  
former Technological Education Institute of Sterea Ellada, Greece

### Field of research:

The research interests include:

- Analytic inequalities, inequalities in inner product spaces and probability inequalities.
- Interpolation methods and their application in image processing.
- Linear and Commutative Algebra.
- Study of Weyl and Dirac particles interaction with electromagnetic fields.

### Publications:

22 publications in refereed journals and 12 publications in conferences

**Citations:** > 250 (*h-index* = 7 *google.scholar*)

### Selected publications

1. Aristides Kechriniotis and Konstantinos K. Delibasis, *On generalizations of Grüss inequality in inner product spaces and applications*, Journal of Inequalities and Applications, Vol. 2010, Article ID 167091, 18 pages, 2010. doi:10.1155/2010/167091.
2. Aristides I. Kechriniotis, konstantinos K. Delibasis, Christos Tsonos and Nicholas Petropoulos, *a new parallel polynomial division by a separable*

*polynomial via hermite interpolation with applications*, Electronic Journal of Linear Algebra, Volume 23, pp. 770-781, August 2012.

3. Konstantinos K. Delibasis, Aristides I. Kechriniotis, and Nicholas D. Assimakis, *New Closed Formula for the Univariate Hermite Interpolating Polynomial of Total Degree and its Application in Medical Image Slice Interpolation*, IEEE transactions on signal processing, vol. 60, no. 12, December 2012.
4. Konstantinos K. Delibasis, Aristides I. Kechriniotis, *A New Formula for Bivariate Hermite Interpolation on Variable Step Grids and Its Application to Image Interpolation*, IEEE Transactions on Image Processing, 23(7): 2892-2904 (2014).
5. A. Kechriniotis, C. Tsonos, K. Delibasis, G. Tsigaridas. *On the connection between the solutions to the Dirac and Weyl equations and the corresponding electromagnetic 4-potentials*, Communications in Theoretical Physics, 72, 045201 (2020).