

Press release

Francisco José Bulnes Aguirre

**Algunas Relaciones entre la Inducción
Cohomológica de Vogan-Zuckerman
y la Clasificación de Langlands**

229 pages
Mathematics

available as:

E-Book (pdf, epub, mobi)

Price: € 0,99 (D, A)

ISBN: 978-3-38903-092-9

Print-Buch (PoD)

Price: € 52,95 (D, A)

ISBN: 978-3-38903-093-6

Published in June 2024.

<https://www.grin.com/document/1471178>



Deepening the Understanding:

Vogan-Zuckerman's Cohomological Induction and the Langlands Classification

Acclaimed mathematician Dr. Francisco José Bulnes Aguirre combines two intriguing algebraic concepts in his book “Algunas Relaciones entre la Inducción Cohomológica de Vogan-Zuckerman y la Clasificación de Langlands” (Engl.: “Some Relationships Between Vogan-Zuckerman's Cohomological Induction and the Langlands Classification”), which was published in June 2024 by GRIN.

Dr. Francisco José Bulnes Aguirre's book has two starting points: the first one is David Vogan's findings from his 1980s book “Cohomological Induction and Unitary Representations”, in which he discusses induction problems in representation theory and made a proof of the Induced Representations Theorem by Cohomology of Zuckerman functors, considering characters theory and unipotent algebras. Vogan built on Gregg Zuckerman's lectures in the 1970s, during which the mathematician introduced a new construction: the cohomological induction. The second aspect our author works with is that of the Langlands classification, which was suggested by Robert Langlands in 1973. It is a concept from a Lie algebra, which works as the description of the irreducible representations of a reductive Lie group G .

GRIN Publishing GmbH | TrappentreustraÙe 1 | 80339 München

Tel +49 (0)89 550 559-0 | presse@grin.com | www.grin.com

Extending and generalizing parabolic and cohomological induction results

Our author aims to generalize the results from the Vogan-Zuckerman and Langland theories as a means to obtain a classification of the representations complementary to the irreducible tempered representations but cohomologically and parabolically induced to the irreducible admissible representations. The book closes with an attempt to obtain a formula of characters corresponding to the irreducible representations, from which a complete classification of the unitary representations can be obtained, or at least a significant advance.

“Some Relationships Between Vogan-Zuckerman's Cohomological Induction and the Langlands Classification” is a captivating and engaging read for mathematicians, students of mathematics, and other interested parties alike. Dr. Francisco José Bulnes Aguirre knows how to comprehensibly situate his research within the bigger sphere of algebra and facilitates a deeper understanding of the matter.

About the Author

Dr. Francisco José Bulnes Aguirre has a PhD in Mathematical Sciences and has been the director of the Mathematics Research Centre in Mexico (IINAMEI) since 2015. Our author has done pioneering work in the fields of curvature energy theory, formal theory of engineering and mathematical theory of nanotechnology. Further, he is editor-in-chief of Journals of Mathematics in the USA and in India and a valued member of various international committees of science. Bulnes Aguirre has received more than 20 doctorates honoris causa from many universities, NGO's and other institutions as the Doctor Honoris Causa in Education Philosophy and Peace Ambassador from the ODAEE in Frankfurt, Germany. He has two mathematics post-doctorates in Cuba and Russia and has advanced research in the fields of electronics, micro-electronics, nanomedicine and spintronics.

This book was published by GRIN Publishing in June 2024 (ISBN: 978-3-38903-093-6).

Direct link to the publication: <https://www.grin.com/document/1471178>

Free review copies can be obtained directly from the publisher at presse@grin.com.

Keywords: Modules of Infinite Dimension, Holomorphic Bundles Sheaves, Infinite Dimension Representations, Induced Representations, Langlands Classification, Vogan Cohomology, Zuckerman Functors

Contact:

GRIN Publishing GmbH

TrappentreustraÙe 1

80339 München

Germany