

CONSILIUL NAȚIONAL DE ATESTARE A TITLURILOR,
DIPLOMELOR ȘI CERTIFICATELOR UNIVERSITARE
NATIONAL COUNCIL FOR ATTESTATION OF
ACADEMIC TITLES, DIPLOMAS AND CERTIFICATES
(CNATDCU)

RAPORTUL COMISIEI DE ABILITARE
REPORT OF THE HABILITATION COMMISSION

din data de (date) 12.04.2013

NUMELE și Prenumele candidatului (SURNAME and Forename of the candidate):
Septimiu CRIVEI

Titlul tezei de abilitare / direcțiile principale de cercetare (Title of habilitation thesis / main research areas):
Module and comodule categories: generalizations

Domeniul de studii universitare de doctorat (Field of doctoral studies):
Matematică (Mathematics)
în care urmează să se confere calitatea de conducător de doctorat (future field of doctoral supervision)

Denumirea **Instituției Organizatoare de Studii Universitare de Doctorat (IOSUD) / Instituției Organizatoare de Doctorat (IOD)** unde are loc susținerea publică a tezei de abilitare (Name of the institution organizing doctoral studies (IOSUD), (IOD), where the public defense of the habilitation thesis takes place)
Universitatea Babeș-Bolyai, Cluj-Napoca

Punctele tari ale tezei de abilitare (Strong points of the habilitation thesis):

1. The thesis contains a series of excellent results about categories and several interesting applications to categories of comodules over coalgebras. One of the best results unifies and generalizes the celebrated theorems of Ulmer and Gabriel-Popescu. Other results are related to duality theories. The results have been published in good and very good journals.
2. A part containing deep results and consequences is Section 5.4, which is related to Hopf-Galois extensions and various associated categories of (co)representations.
3. The thesis is very well written. The exposition is clear and the list of references is large. The author presents his ideas and results in a large framework of the research done in the same area by other people.

Punctele slabe ale tezei de abilitare (Weak points of the habilitation thesis):

1. The list of papers of the author is consistent. However, the number of his papers published in very prestigious journals is relatively small compared to the total number of papers.
2. The thesis should include some ideas of proofs.

Rezultatul votului / observații / concluziile comisiei de abilitare se motivează în continuare (Voting result / observations / premises for the conclusions of the habilitation commission are as follows)

The members of the habilitation commission unanimously agree to accept the habilitation thesis and recommend to be conferred to the candidate the habilitation certificate.

A suggestion: the author has been interested in categories of comodules over coalgebras. However, except the results presented in Section 5.4, no interest seemed to be shown up for

P. Cristea

V. Brînzănescu

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applications to (co)representation theory of Hopf algebras. Also indications about such an interest do not appear in the list of problems of future consideration, in part II, about career evolution and development plans. It would be highly recommended that such a topic should be approached, and moreover, applications to quantum groups to be looked for.

(a se continua pe verso – dacă este necesar) (continue overleaf if necessary)

COMISIA DE ABILITARE
HABILITATION COMMISSION

NUMELE și Prenumele

SURNAME and Forename

1. Vasile Brinzanescu
2. Sorin Dascalescu
3. Gerhard Pfister

Semnătura

Signature

V. Brinzanescu

SD
Pfister