

# UEFISCDI/CNCS evaluation (Jan. 2017)

2.1 (20%) Please evaluate the general solution described in the project proposal in the current context and its potential impact in the future. Please comment the following aspects:

- (1) the significance and the degree of difficulty of the issue addressed;
- (2) the originality of the proposed solution according to the objectives;
- (3) the potential to move forward the knowledge in the field and to influence the direction of thinking and activity.

<input type="checkbox"/> 5 - Excellent	This is not groundbreaking science, or at least the proposer has not explained very convincingly why one should be excited about this project. The methodology does not appear to be very original. Indeed, the proposal fails to describe the real significant impact
<input type="checkbox"/> 4.5	
<input type="checkbox"/> 4 - Very Good	
<input type="checkbox"/> 3.5	behind the state of the art in the field, and this limits originality of the project and lowers the novelty aspects. The proposed approach to describe deuteron interactions with nuclei is not based on a theoretical basis but rather on models. Without a sound theoretical
<input type="checkbox"/> 3 - Good	
<input checked="" type="checkbox"/> 2.5	approached it is not clear what progress can be made.
<input type="checkbox"/> 2 - Satisfying	
<input type="checkbox"/> 1.5	
<input type="checkbox"/> 1 - Poor	
<input type="checkbox"/> 0.5	
<input type="checkbox"/> 0 - Absent	
Score(2.1)=10.00	

2.2 (20%) Please evaluate the method and the work plan as defined in the project proposal as a concrete approach to reach the solution provided.

Please comment how well are chosen the methods, the tools for investigation, and the efficiency of the work plan related to the time and the resources proposed. Potential issues have been treated properly? There have been mentioned alternative approaches? There have been mentioned deliverables and what importance has been given to publication of the results in prestigious international journals? How do you assess the research project team structure, its functioning and what is the degree of complementarity of the team members?

<input type="checkbox"/> 5 - Excellent	The proposal is very vague, and so is the work plan. It is difficult to gauge whether the objectives can be reach given the lack of technical details provided in the project
<input type="checkbox"/> 4.5	
<input type="checkbox"/> 4 - Very Good	description. The work plan and the deliverables linked to the objectives of the proposal is very generic discussed. The list of deliverables and milestones is not sufficiently specified.
<input type="checkbox"/> 3.5	
<input type="checkbox"/> 3 - Good	
<input checked="" type="checkbox"/> 2.5	
<input type="checkbox"/> 2 - Satisfying	
<input type="checkbox"/> 1.5	
<input type="checkbox"/> 1 - Poor	
<input type="checkbox"/> 0.5	
<input type="checkbox"/> 0 - Absent	

vs.

Phys. Rev. C (IF=3.7) on MS submitted Jan. 16, published Feb. 14, 2017

on Ref. [19] (PRC 94,044619, Oct. 2016) and a review of M. Avrigeanu's papers - proposal basis:

From: "prc@aps.org" <prc@aps.org>  
 To: marilena.avrigeanu@nipne.ro  
 Sent: Thursday, January 26, 2017 7:19 PM  
 Subject: Your\_manuscript CA10483 Avrigeanu

Re: CA10483  
 Additive empirical parametrization and microscopic study of the deuteron breakup  
 by M. Avrigeanu and V. Avrigeanu

Dear Dr. Avrigeanu,

The above manuscript has been reviewed by one of our referees. Comments from the report appear below for your consideration.

When you resubmit your manuscript, please include a summary of the changes made and a brief response to all recommendations and criticisms.

Yours sincerely,

Assistant Editor  
 Physical Review C  
 Email: prc@aps.org  
<http://journals.aps.org/prc/>

### PROBLEMS WITH MANUSCRIPT:

In reviewing the figures of your paper, we note that the following changes would be needed in order for your figures to conform to the style of the Physical Review. Please check all figures for the following problems and make appropriate changes in the text of the paper itself wherever needed for consistency.

Figure(s) [1-4]  
 Figure sublabels should be printed on the figures. The preferred form is lowercase letters in parentheses: (a), (b), etc.

### Report of the Referee -- CA10483/Avrigeanu

This is an important new summary of models for deuteron breakup (complete and partial).

One minor thing could be explained better: how 'constraint' on breakup could be organized. Is it a simple hard limit?

I note their politeness in referring to deficiencies of the work of [19], and in calling for more research on breakup (both theory and experiment).

PHYSICAL REVIEW C 95, 024607 (2017)

### Additive empirical parametrization and microscopic study of deuteron breakup

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(Received 16 January 2017; published 14 February 2017)