

FIȘA DE VERIFICARE A ÎNDEPLINIRII STANDARDDELOR CNATDCU

Dr. CATALIN MATEI, CS2

Standarde minimale necesare și obligatorii pentru conferirea titlurilor didactice din învățământul superior și a gradelor profesionale de cercetare-dezvoltare – Domeniul Fizică
în conformitate cu Ordinul de ministru 6129 din 2016
Anexa 3 – Comisia de Fizică

| No | Îndeplinirea standardelor minimale conform OMESNCS Nr. 6129/2012.2016 | | Standarde îndeplinite, conform Comisiei CNATDCU Nr. 3 FIZICA |
|----|-----------------------------------------------------------------------|----------------|--------------------------------------------------------------|
| | Condiții minimale (Punctaj) | Minim prevazut | Realizat (Catalin Matei) |
| 1 | Teaching and Professional Activity | $A \geq 2$ | A = 8.02 |
| 2 | Research Activity | $I \geq 4$ | I = 5.736 |
| | | $P \geq 4$ | P = 9.125 |
| 3 | Activity Impact Recognition | $C \geq 40$ | C = 71.43 |
| | | $h \geq 10$ | h = 15 |
| | Punctaj total CNATDCU $T = A + P/2 + I/2 + C/20 + h/5$ | $T \geq 12$ | T = 8.02 + 2.87 + 4.56 + 3.57 + 3 = 22.02 |



1. Activitate didactică și profesională

| No. | Type of Activities | Indicators | |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------|
| 4 | Carti, manuale, indrumare de laborator, in edituri nationale in calitate de autor, note interne, prezentari sustinute pentru aprobarea analizelor de date in cadrul colaborarilor mari | $A_4 = \sum_i 0.5 / n_i^{ef}$ | 1 |
| 6 | Lucrari in extenso (cel putin 3 pagini) in calitate de autor, publicate in Proceedings indexate ISI. | $A_6 = \sum_i 0.2 / n_i^{ef}$ | 0.73 |
| 10 | Director/responsabil/coordonator in valoare V_i euro, castigate prin competitie nationala sau internationala. Sumele in lei au fost convertite in euro conform cursului BNR; | $A_{10} = \sum_i V_i / 100.000$ | 6.29 |
| | TOTAL | $A = \sum_{i=1}^{10} A_i$ | 8.02 |

A4. Carti, manuale, indrumare de laborator, in edituri nationale

| No. | Manuals, laboratory guides | n_i^{ef} | $0.5 / n_i^{ef}$ |
|-----|-----------------------------------------------------------------------------------------------------------------------------|------------|------------------|
| 1 | Neutron detector characterization with ^{252}Cf , C. Matei, JRC Technical Notes, JRC61969 (2010) (26p) | 1 | 0.5 |
| 2 | Digital Techniques for Neutrons and Fission Fragments Coincidence Measurements", C. Matei, JRC Technical Notes (2011) (30p) | 1 | 0.5 |
| | Total A₄ | | 1 |

A6. Lucrari in extenso (cel putin 3 pagini) publicate in Proceedings indexate ISI

| No. | Papers in extenso (at least 3 pages) published in ISI-indexed Proceedings | n_i^{ef} | $0.2 / n_i^{ef}$ |
|-----|---------------------------------------------------------------------------|------------|------------------|
| 1 | Petruse, EPJ Web of Conferences 227 02009 (2020) | 14 | 0.014 |
| 2 | Petruse, AIP Conf. Proc. 2076, 060005 (2019) | 11.33 | 0.018 |
| 3 | Matei, Journal of Physics: Conference Series 940 012025 (2018) | 4.00 | 0.050 |
| 4 | Lattuada, EPJ Web of Conferences 184, 02008 (2018) | 10 | 0.02 |
| 5 | Guardo, EPJ Web of Conferences 184, 02006 (2018) | 10.67 | 0.019 |
| 6 | Xu, EPJ Web of Conferences 146 01015 (2017) | 5.50 | 0.036 |
| 7 | Chesnevskaya, EPJ Web of Conferences 165, 01011 (2017) | 9.5 | 0.021 |
| 8 | Guardo, EPJ Web of Conferences 165, 01026 (2017) | 10.67 | 0.019 |
| 9 | Lattuada, EPJ Web of Conferences 165, 01034 (2017) | 9 | 0.022 |
| 10 | Belloni, EPJ Web of Conferences 146 04062 (2017) | 8.00 | 0.025 |
| 11 | Matei, Il Nuovo Cimento 39 C 360 (2016) | 5.50 | 0.036 |

| | | | |
|----|-----------------------------------------------------------------|----------------------------|--------------|
| 12 | Iancu, Journal of Physics: Conference Series 763, 012003 (2016) | 7.00 | 0.029 |
| 13 | Yassin, AIP Conf. Proc. 1722, 030011 (2016) | 5.50 | 0.036 |
| 14 | Hambusch, EPJ Web of Conferences 62, 02001 (2013) | 6.50 | 0.031 |
| 15 | Madurga, AIP Conf. Proc. 1336, 586 (2011) | 10.33 | 0.019 |
| 16 | Bardayan, PoS (NIC-XI) 202 (2011) | 10.67 | 0.019 |
| 17 | Chipps, PoS (NIC-XI) 205 (2011) | 10.00 | 0.020 |
| 18 | Peters, EPJ Web of Conferences 2, 06003 (2010) | 11.00 | 0.018 |
| 19 | Cizewski, AIP Conf. Proc. 1175, 147 (2009) | 16.67 | 0.012 |
| 20 | Matei, AIP Conf. Proc. 1099, 790 (2009) | 6.67 | 0.030 |
| 21 | Cizewski, AIP Conf. Proc. 1099, 724 (2009) | 9.00 | 0.022 |
| 22 | Jones, AIP Conf. Proc. 1098, 153 (2009) | 16.00 | 0.013 |
| 23 | Cizewski, AIP Conf. Proc. 1090, 463 (2009) | 16.00 | 0.013 |
| 24 | Chipps, AIP Conf. Proc. 1090, 471 (2009) | 10.00 | 0.020 |
| 25 | Pain, AIP Conf. Proc. 1090, 570 (2009) | 10.00 | 0.020 |
| 26 | Moazen, Acta Physica Polonica B 40, 699 (2009) | 8.50 | 0.024 |
| 27 | Matei, PoS (NIC-X) 138 (2008) | 7.50 | 0.027 |
| 28 | Chae, PoS (NIC-X) 169 (2008) | 10.00 | 0.020 |
| 29 | Bardayan, PoS (NIC-X) 067 (2008) | 11.33 | 0.018 |
| 30 | Chipps, PoS (NIC-X) 059 (2008) | 10.00 | 0.020 |
| 31 | Kozub, PoS (NIC-X) 135 (2008) | 12.00 | 0.017 |
| 32 | Hornish, PoS (NIC-IX) 119 (2006) | 7.50 | 0.027 |
| | | Total A₆ | 0.735 |

A10. Director/responsabil/coordonator in valoare V_i euro, castigate prin competitie nationala sau internationala

| No. | Manager/responsible person for research projects amounting to V _i Euro won through competition | V _i | V _i /100000 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|------------------------|
| 1 | Portable fast-neutron spectrometer, National Measurement Office, UK, 2013 | 211000 GBP = 254086 EUR (GBP/EUR = 1.2042) | 2.54 |
| 2 | PN III: P5/Subprogram 5.1/ELI-RO, 2020 Towards accurate cross section measurements by new methods for characterization of the γ -ray beam at ELI-NP | RON 702166 = 144119 EUR (EUR/RON = 4.8721) | 1.44 |
| 3 | PN-III-P4-PCE-2021-1014 Studiul nucleosintezei de la Big Bang la p-proces folosind fascicule gama | RON 1145000 = 231383 EUR (EUR/RON = 4.9485) | 2.31 |
| | | Total A₁₀ | 6.29 |

2. Activitatea de cercetare

| No. | Type of Activities | Indicators | |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------|
| 1 | Articole științifice originale in extenso ca autor publicate in reviste cotate ISI | $I = \sum_i AIS_i / n_i^{ef}$ | 5.736 |
| 2 | Articole științifice originale in extenso ca autor publicate in reviste cotate ISI si in proceedings cotate ISI, ca prim autor sau ca autor corespondent. | $P = \sum_i AIS_i$ | 9.125 |

3. Recunoasterea impactului activității

| No. | Type of Activities | Indicators | |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------|
| | Citations in scientific journals with impact factor found in InCites Journal Citation Reports or in books at Web of Science recognised publishing houses. Citations originating from articles having the candidate as author or co-author shall not be taken into account. | $C = \sum_i c_i / n_i^{ef}$ | 71.432 |
| | Hirsch Index | h | 15 |

c_i = number of citations in ISI journals of publication i

| No | Original scientific articles in extenso as author | n_i^{ef} | AIS | $citations$ c_i | AIS_i / n_i^{ef} | AIS_i | c_i / n_i^{ef} |
|----|----------------------------------------------------------------------|------------|-------|----------------------|--------------------|---------|------------------|
| 1 | Lan et al., Phys Rev C 105, 044618 (2022) | 8 | 0.925 | 1 | 0.116 | 0 | 0.125 |
| 2 | Soderstrom et al., NIM A 1027 166171 (2022) | 11.33 | 0.36 | 0 | 0.032 | 0 | 0.000 |
| 3 | Aliotta et al., J. Phys. G: Nucl. Part. Phys. 49 (1) 010501 (2021) | 13.33 | 1.2 | 1 | 0.090 | 0 | 0.075 |
| 4 | Palmerini et al., Eur. Phys. J. Plus 136 (2021) 898 | 17.67 | 0.6 | 1 | 0.034 | 0 | 0.057 |
| 5 | Soderstrom et al., Applied Radiation and Isotopes 167, 109441 (2021) | 5.50 | 0.2 | 3 | 0.036 | 0 | 0.545 |
| 6 | Soderstrom et al., Nature Communications 11, 3242 (2020) | 10.00 | 5.3 | 3 | 0.530 | 0 | 0.300 |
| 7 | Munch et al., Phys. Rev. C 101, 055801 (2020) | 13.33 | 0.925 | 3 | 0.069 | 0.925 | 0.150 |
| 8 | Soderstrom et al., J. Instr. 14, T11007 (2019) | 10.33 | 0.24 | 1 | 0.023 | 0 | 0.097 |
| 9 | Soderstrom et al., Rom. Rep. Phys. 71, 206 (2019) | 7.50 | 0.24 | 1 | 0.032 | 0 | 0.133 |
| 10 | Turturica et al., Nucl. Instr. Meth. A921, 27 (2019) | 12.33 | 0.362 | 3 | 0.029 | 0.362 | 0.243 |
| 11 | Lan et al., Phys. Rev. C. 98, 054601 (2018) | 10.67 | 0.925 | 7 | 0.087 | 0 | 0.656 |
| 12 | Gales et al., Reports of Progress in Physics 81 (9) 094301 (2018) | 12.33 | 7 | 111 | 0.568 | 0 | 9.000 |
| 13 | Chesnevskaya et al., J. Instr. 13, T05006 (2018) | 8.00 | 0.451 | 3 | 0.056 | 0.451 | 0.375 |

| | | | | | | | |
|----|-----------------------------------------------------|-------|-------|----|-------|-------|-------|
| 14 | Chipps et al., Phys. Rev. C 95, 045808 (2017) | 10.00 | 0.925 | 1 | 0.093 | 0 | 0.100 |
| 15 | La Cognata et al., J. Instr. 12, C03079 (2017) | 10.67 | 0.451 | 2 | 0.042 | 0 | 0.188 |
| 16 | Matei et al., Phys. Rev. C 95, 024606 (2017) | 5.00 | 0.925 | 7 | 0.185 | 0.925 | 1.400 |
| 17 | Peters et al., Nucl. Instr. Meth. A836, 122 (2016) | 14.67 | 0.362 | 29 | 0.025 | 0 | 1.977 |
| 18 | Matei et al., J. Instr. 11, P05025 (2016) | 5.50 | 0.451 | 2 | 0.082 | 0.451 | 0.364 |
| 19 | Weller et al., Rom. Rep. Phys. 68, S447 (2016) | 6.50 | 0.242 | 13 | 0.037 | 0.242 | 2 |
| 20 | Ur et al., Rom. Rep. Phys. 68, S483 (2016) | 10.33 | 0.242 | 26 | 0.023 | 0 | 2.516 |
| 21 | Camera et al., Rom. Rep. Phys. 68, S539 (2016) | 8.00 | 0.242 | 27 | 0.030 | 0 | 3.375 |
| 22 | Tesileanu et al., Rom. Rep. Phys. 68, S699 (2016) | 11.33 | 0.242 | 18 | 0.021 | 0 | 1.588 |
| 23 | Pain et al., Phys. Rev. Lett. 114, 212501 (2015) | 13.33 | 3.45 | 25 | 0.259 | 0 | 1.875 |
| 24 | Hamsch et al., Nucl. Data Sheets 119, 38 (2014) | 7.5 | 0.65 | 7 | 0.087 | 0 | 0.933 |
| 25 | Schmitt et al., Phys. Rev. C 88, 064612 (2013) | 16.00 | 0.925 | 34 | 0.058 | 0 | 2.125 |
| 26 | Matei et al, Nucl. Instr. Meth. A676, 135 (2012) | 3.00 | 0.362 | 28 | 0.121 | 0.362 | 9.333 |
| 27 | Kozub et al., Phys. Rev. Lett. 109, 172501 (2012) | 12.67 | 3.518 | 57 | 0.278 | 0 | 4.500 |
| 28 | Schmitt et al., Phys. Rev. Lett. 108, 192701 (2012) | 15.67 | 3.518 | 77 | 0.225 | 0 | 4.915 |
| 29 | Chipps et al., Phys. Rev. C 86, 014329 (2012) | 9.50 | 0.925 | 11 | 0.097 | 0 | 1.158 |
| 30 | Pittman et al., Phys. Rev. C 85, 065804 (2012) | 10.33 | 0.925 | 4 | 0.090 | 0 | 0.387 |
| 31 | Moazen et al., Eur. Phys. J. A 47, 66 (2011) | 10.33 | 0.76 | 4 | 0.074 | 0 | 0.387 |
| 32 | Matei et al, IEEE Trans. Nucl Sci 6172863 (2011) | 3 | 0.417 | 0 | 0.139 | 0.417 | 0 |
| 33 | Chipps et al., Phys. Rev. C 84, 059801 (2011) | 8.50 | 0.925 | 3 | 0.109 | 0 | 0.353 |
| 34 | Chipps et al., Phys. Rev. C 82, 045803 (2010) | 10.00 | 0.925 | 23 | 0.093 | 0 | 2.3 |
| 35 | Chae et al., Phys. Rev. C 82, 047302 (2010) | 10.00 | 0.925 | 4 | 0.093 | 0 | 0.400 |
| 36 | Bardayan et al., Phys. Rev. C 81, 065802 (2010) | 9.00 | 0.925 | 8 | 0.103 | 0 | 0.889 |
| 37 | Chipps et al., Phys. Rev. C 80, 065810 (2009) | 10.00 | 0.9 | 5 | 0.090 | 0 | 0.500 |
| 38 | Bardayan et al., Eur. Phys. J. A 42, 457 (2009) | 10.67 | 0.72 | 10 | 0.068 | 0 | 0.938 |
| 39 | Chae et al., Phys. Rev. C 79, 055804 (2009) | 10.00 | 0.9 | 22 | 0.090 | 0 | 2.200 |
| 40 | Chipps et al., Phys. Rev. Lett. 102, 152502 (2009) | 10.00 | 3.3 | 28 | 0.330 | 0 | 2.800 |
| 41 | Bardayan et al., Phys. Rev. C 78, 052801(R) (2008) | 11.33 | 0.89 | 16 | 0.079 | 0 | 1.412 |
| 42 | Buchmann et al., Nucl. Phys. A805, 462c (2008) | 8 | 0.6 | 1 | 0.075 | 0 | 0.125 |
| 43 | Matei et al., Phys. Rev. C 78, 065801 (2008) | 3 | 0.89 | 11 | 0.297 | 0.89 | 3.667 |

| | | | | | | | |
|----|--------------------------------------------------|-------|-----|----|-------|-------|--------|
| 44 | Matei et al., Phys. Rev. Lett. 97, 242503 (2006) | 11.67 | 3.4 | 58 | 0.291 | 3.4 | 4.971 |
| 45 | Matei et al, Nucl. Phys. A578, 403c (2005) | 2 | 0.7 | 0 | 0.350 | 0.7 | 0 |
| | Total | | | | 5.736 | 9.125 | 71.432 |

