

**НАЦИОНАЛНА НАУЧНА ПРОГРАМА  
„ИНФОРМАЦИОННИ И КОМУНИКАЦИОННИ ТЕХНОЛОГИИ ЗА ЕДИНЕН  
ЦИФРОВ ПАЗАР В НАУКАТА, ОБРАЗОВАНИЕТО И СИГУРНОСТТА  
(ИКТВНОС)“**

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**ПЛОВДИВСКИ УНИВЕРСИТЕТ „ПАИСИЙ ХИЛЕНДАРСКИ“**

**01.12.2020 г. – 30.11.2021 г.**

**СПИСЪК С НАУЧНИ ПУБЛИКАЦИИ**

**КОМПОНЕНТ 1**

**ЕЛЕКТРОННА ИНФРАСТРУКТУРА ЗА ОТВОРЕНА НАУКА И ОТВОРЕН ДОСТЪП ДО НАУЧНИ РЕЗУЛТАТИ**

**Работен пакет 1.1. Високопроизводителни и разпределени пресмятания**

**Научна задача 1.1.1. Интегриране на съвременните изчислителни системи и системи за съхранение на данни, софтуер, мидълуер и услуги; предоставяне на българските изследователи прозрачен и отворен достъп до изчислителната инфраструктура с цел разработване и експлоатация на изчислително интензивни научни приложения.**

**Публикации по задача 1.1.1.**

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3. Kyurkchiev, N., A. Iliev, A. Rahnev, A refinement of the extended Euclidean algorithm. International Electronic Journal of Pure and Applied Mathematics, Volume 15, No. 1 2021, 33-44, ISSN: 1314-0744. doi: 10.12732/iejpam.v15i1.4  
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4. Iliev, A. , N. Kyurkchiev, A. Rahnev, T. Terzieva, A refinement of the Boh's algorithm for computing modular multiplicative inverse. International Electronic Journal of Pure and Applied Mathematics, Volume 15, No. 1 2021, 45-53, ISSN: 1314-0744. doi: 10.12732/iejpam.v15i1.5  
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5. Kyurkchiev, V., M. Vasileva, A. Iliev, A. Rahnev, N. Kyurkchiev, Comments on Some Inverted Cumulative Distributions: “Saturation in the Hausdorff Sense”, Applications, International Journal of Differential Equations and Applications, 2021, Vol. 20, No. 2, 187–196, doi: 10.12732/ijdea.v20i2.5, ISSN (Print): 1311-2872; ISSN (Online): 1314-6084. (SJR: 0.103) Scopus, Zentralblatt MATH.  
<http://www.ijpam.eu/en/index.php/ijdea/article/view/5960>
6. Kyurkchiev, N., A. Iliev, O. Rahneva, V. Kyurkchiev. A look at some trigonometric-G families with baseline inverted exponential (cdf). Applications. International Journal of Differential Equations and Applications, 2021, Vol. 20, No. 1, 103–119, ISSN (Print): 1311-2872; ISSN (Online): 1314-6084. doi: 10.12732/ijdea.v20i1.8 (SJR: 0.103) Scopus, Zentralblatt MATH.  
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7. Malinova, M., Investigating new dependencies in the structure of near-rings over finite cyclic groups, International Journal of Differential Equations and Applications, 2021, Vol. 20, No. 2, 197–206, doi: 10.12732/ijdea.v20i2.6, ISSN (Print): 1311-2872; ISSN (Online): 1314-6084. (SJR: 0.103) Scopus, Zentralblatt MATH.  
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## **РП.1.2. Компютърно и математическо моделиране с приложение в инженерните и природните науки**

### **Задача 1.2.5. Предвиждане и гарантиране на качеството в човеко-кибер-физически системи**

#### **Публикации по задача 1.2.5.**

1. Kyurkchiev, N., A. Iliev, A. Rahnev, T. Terzieva. On the Extended Half–Logistic Model by H. Bakouch with ”Polynomial Variable Transfer”. Application to Approximate the Specific ”Data BG COVID–19”, AIP Conference Proceedings, Volume 2321, Issue 1, 2021, ISSN: 0094-243X, (SJR 2019: 0.190) Web of Science, Scopus.  
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<http://www.ijpam.eu/en/index.php/ijdea/article/view/5963>
6. Pavlov, N., Efficient Matrix Multiplication Using Hardware Intrinsic and Parallelism with C#, International Journal of Differential Equations and Applications, 2021, Vol. 20, No. 2, 217–223, doi: 10.12732/ijdea.v20i2.8, ISSN (Print): 1311-2872; ISSN (Online): 1314-6084. (SJR: 0.103) Scopus, Zentralblatt MATH.  
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