



Utama Alan Deta, S.Pd., M.Pd., M.Si.

| Position | <i>Modern Physics, Statistical Physics, and Quantum Physics Lecturer in Physics Education Study Program</i> | | |
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| | Assistant Professor in Modern Physics, Statistical Physics, and Quantum Physics | | |
| | <i>Degree</i> | <i>University</i> | <i>Year</i> |
| Academic career | Bachelor at Physics Education | Universitas Negeri Surabaya - Indonesia | 2006-2011 |
| | Master at Science Education (Physics) | Universitas Sebelas Maret - Indonesia | 2011-2013 |
| | Master at Physics | Universitas Sebelas Maret - Indonesia | 2012-2013 |
| | The 2nd Particle Physics School in South-East Asia (PPSEA) 2012 | High Energy Accelerator Research Organization (KEK) Jepang, Universitas Gajah Mada (UGM), Badan Tenaga Atom Nasional (BATAN), and Grup Fisikawan Teoritik Indonesia (GFTI) | 2012 |
| | School of Physics (SoP): Particle Physics and Physics of Complex System | Institut Pertanian Bogor (IPB) - Indonesia | 2013 |
| | School of Physics (SoP) VI: Gravity and Its Application in Astrophysics and Geophysics | UIN Sunan Kalijaga - Indonesia | 2014 |
| | Peningkatan Keterampilan Dasar Teknik Instruksional (PEKERTI) dan Applied Approach (AA) | Universitas Negeri Surabaya - Indonesia | 2014 |
| | The South East Asian Mathematical Society (SEAMS) School: Algebras and Their Applications (Quantum Physics, Cryptography and Statistics) | Institut Penyelidikan Matematik (INSPEM) Universiti Putra Malaysia (UPM) - Malaysia | 2015 |
| | Training on Awareness and Internal Audit of Quality Management System ISO 9001:2015 | TUV Rheinland Group and FMIPA Universitas Negeri Surabaya - Indonesia | 2017 |
| | School of Physics (SoP) XI: Geometri Riemann | Sekolah Fisika Indonesia and UIN Walisongo - Indonesia | 2018 |
| | Pendidikan dan Pelatihan Dasar (Diklatsar) CPNS Golongan III Angkatan II Tahun 2017 | Pusdiklat Pegawai Kemdikbud dan Pusdiklat Kemristekdikti - Indonesia | 2018 |

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| | Workshop of National Scientific Journal Accreditation Assessor 2019 | Kemristekdikti - Indonesia | 2019 |
| | Government Employer at Ministry of Research, Technology and Higher Education as a Lecturer Institution (now Ministry of Education and Culture) | Universitas Negeri Surabaya - Indonesia | 2014-now |
| Employment | <i>Position</i> | <i>Employer</i> | <i>Period</i> |
| | Lecturer on Physics Education Study Program | Universitas Negeri Surabaya - Indonesia | 2014-2018 |
| | Quality Assurance Unit Team | Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya- Indonesia | 2016-2018 |
| | Open Journal System (OJS) Developer Team | Universitas Negeri Surabaya (Unesa) - Indonesia | 2017-2018 |
| | Publication Acceleration Team | Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya - Indonesia | 2018 |
| | Secretary of the Center for Mathematics and Science Publication Study (PKPMS) | Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya - Indonesia | 2018 |
| | Tutor | Indonesian Journal Volunteer (RJI) - Indonesia | 2018-Now |
| | Assessor of National Journal Accreditation (Arjuna) | Ministry of Research Technology and Higher Education - Indonesia | 2019-Now |
| | Head of Journal Management Team | Universitas Negeri Surabaya - Indonesia | 2019-Now |
| | Conference Management Team | Universitas Negeri Surabaya - Indonesia | 2019-Now |
| | Scientific Publication Team | Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya - Indonesia | 2019-Now |
| | Assistant Professor in Modern Physics , Statistical Physics, and Quantum Physics | Universitas Negeri Surabaya - Indonesia | 2019-Now |
| Research and development projects over the last 5 years | | | |
| | <p>2016: First Year Student Life Adjustment Profile in Department of Physics FMIPA Universitas Negeri Suraabaya- Faculty of Mathematics and Natural Sciences Unesa Project - IDR 10,000,000 (research chairman)</p> <p>2016: Development of English Language Teaching Materials for Statistics Physics Lectures in the Featured Classes in the Physics Department - Faculty of Mathematics and Natural Sciences Project - IDR 10,000,000 (research member)</p> | | |

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| | <p>2017: Development of Problem-Solving Skills Assessment Instrument Based on Pedagogical Content Knowledge for Basic Physics Materials in Pre-service Physics Teachers - Faculty of Mathematics and Natural Sciences Unesa Project - IDR 10,000,000 (research member)</p> <p>2018: Development of Teaching Materials for Measurement Systems in Physics Course Based on Guided Inquiry Laboratory - Unesa's Research Project - IDR 10,000,000 (research member)</p> <p>2018: Tracer Study in Physics Education Program - Unesa's Research Project - IDR 10,000,000 (research chairman)</p> <p>2018: Tracer Study in Physics Program - Unesa's Research Project - IDR 10,000,000 (research member)</p> <p>2019: Application of Toulmin's Argument Pattern (TAP) in Learning Process of School Physics Course to Improve Critical Thinking of Undergraduate Student - Unesa's Research Project - IDR 10,000,000 (research member)</p> | |
| Patents and proprietary rights | Title | Year |
| | Nurita Apridiana Lestari, Utama Alan Deta, Meta Yantidewi, Measurement System in Physics (HaKI EC00201976376) | 19 August 2019 – 19 August 2069 |
| Important publications over the last 5 years | Title | Year |
| | A Nurlailiyah, UA Deta. 2015. Studi Korelasi antara Kemampuan Matematika dengan Hasil Belajar Fisika di SMA PGRI Sumberrejo Bojonegoro Tahun Ajaran 2014/2015. <i>Jurnal Penelitian Fisika dan Aplikasinya (JPFA)</i> 5 (2) 64-69. DOI: https://dx.doi.org/10.26740/jpfa.v5n2.p64-69 | 2015 |
| | UA Deta, Suparmi. 2015. The properties of Q-deformed Hyperbolic and Trigonometric Functions in Quantum Deformation. <i>AIP Conference Proceedings</i> 1677 030007. DOI: https://dx.doi.org/10.1063/1.4930629 | 2015 |
| | KIK Alemgadmi, Suparmi, Cari, UA Deta. 2015. Approximation Solution of Schrodinger Equation for Q-deformed Rosen-Morse using Supersymmetry Quantum Mechanics (SUSY QM). <i>AIP Conference Proceedings</i> 1677 030004. DOI: https://dx.doi.org/10.1063/1.4930626 | 2015 |
| | Cari, Suparmi, BN Pratiwi, UA Deta. 2015. Analytical Solution of D-Dimensional Dirac Equation with q-Deformed Trigonometric Scarf Potential for Exact Spin Symmetry using Romanovski Polynomial. <i>International Conference on Mathematics, Science, and Education 2015 (ICMSE 2015)</i> P50-P58. http://icmse.unnes.com/2015/wp-content/uploads/2016/03/61_P.pdf | 2015 |
| | Suparmi, Cari, UA Deta, J Handhika. 2016. Energy Analysis of Four Dimensional Extended Hyperbolic Scarf I plus Three Dimensional Separable Trigonometric Noncentral Potentials Using SUSY QM approach. <i>Journal of Physics: Conference Series</i> 776 012077. DOI: https://dx.doi.org/10.1088/1742-6596/776/1/012077 | 2016 |
| | Suparmi, Cari, BN Pratiwi, UA Deta. 2016. Solution of D Dimensional Dirac Equation for Hyperbolic Tangent Potential using NU Method and Its Application in Material Properties. <i>AIP Conference Proceedings</i> 1710 030010. DOI: https://dx.doi.org/10.1063/1.4941476 | 2016 |
| | UA Deta. 2017. Peningkatan Pemahaman Materi Kuantisasi | 2017 |

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| | Besaran Fisis pada Calon Guru Fisika menggunakan Metode Diskusi Kelas dan Scaffolding. <i>Jurnal Ilmiah Pendidikan Fisika Al-BiRuNi</i> 6 (2) 201-207. DOI: https://dx.doi.org/10.24042/jipfalbiruni.v6i2.1801 | |
| | NA Lestari, MNR Jauhariyah, UA Deta . 2017. Pelatihan Manajemen Laboratorium untuk Pengelola Laboratorium IPA Tingkat SMA di Kabupaten Bojonegoro. <i>Jurnal Abdi</i> 3 (1) 17-21. DOI: https://dx.doi.org/10.26740/ja.v3n1.p17-21 | 2017 |
| | UA Deta , N Suprpto, H Mubarak, AS Adam, A Kholiq. 2018. The Comparison of Static Friction Coefficient on Wood Between the Combination of Wood-Metal Load System and Wood-Sand Load System. <i>International Conference on Science and Technology (ICST 2018)</i> . DOI: https://dx.doi.org/10.2991/icst-18.2018.179 | 2018 |
| | N Suprpto, AS Adam, UA Deta , H Mubarak, A Kholiq. 2018. The Comparison of Gravitational Acceleration through Optical Sensor and Receptor Pad Apparatus. <i>International Conference on Science and Technology (ICST 2018)</i> . DOI: https://dx.doi.org/10.2991/icst-18.2018.178 | 2018 |
| | M Yantidewi, UA Deta , NA Lestari. 2018. A Real-Time System for Monitoring Methane Level in Biogas Production A Preliminary Study. <i>International Conference on Science and Technology (ICST 2018)</i> . DOI: https://dx.doi.org/10.2991/icst-18.2018.41 | 2018 |
| | M Yantidewi, T Prastowo, UA Deta . 2018. Pelatihan Pembuatan Alat Peraga Mesin Stirling untuk Guru Fisika SMA. <i>Jurnal Abdi: Media Pengabdian Kepada Masyarakat</i> 4 (1) 51-54. DOI: https://dx.doi.org/10.26740/ja.v4n1.p51-54 | 2018 |
| | NA Lestari, N Suprpto, UA Deta , M Yantidewi. 2018. Implementation of Multimodel Active Learning to Improve Basic Teaching Skills of Pre-Service Physics Teachers. <i>Journal of Physics: Conference Series</i> 1108 (1) 012119. DOI: https://doi.org/10.1088/1742-6596/1108/1/012119 | 2018 |
| | N Suprpto, UA Deta , NA Lestari, A Kholiq, AS Adam, H Mubarak, MNR Jauhariyah. 2018. Pre-service Physics Teachers' Understanding on Total Lunar Eclipse: A Response of Supermoon on January 31 st 2018. <i>Journal of Physics: Conference Series</i> 1108 (1) 012097. DOI: https://doi.org/10.1088/1742-6596/1108/1/012097 | 2018 |
| | M Yantidewi, NA Lestari, UA Deta . 2018. Conducting A Real-Time Instrument System for Observing Biogas Digester's Temperature and Humidity. <i>Proceedings of the Mathematics, Informatics, Science, and Education International Conference (MISEIC 2018) in Advances in Intelligent Systems Research</i> . DOI: https://dx.doi.org/10.2991/miseic-18.2018.58 | 2018 |
| | TN Ain, HAC Wibowo, A Ruhman, UA Deta . 2018. The Scientific Argumentation Profile of Physics Teacher Candidate in Surabaya. <i>Journal of Physics: Conference Series</i> 997 (1) 012025. DOI: https://doi.org/10.1088/1742-6596/997/1/012025 | 2018 |
| | M Yantidewi, MS Muntini, UA Deta , NA Lestari. 2018. The Design of a PC-Based Real-Time System for Monitoring Methane and Oxygen Concentration in Biogas Production. <i>Journal of Physics: Conference Series</i> 997 (1) 012018. DOI: https://doi.org/10.1088/1742-6596/997/1/012018 | 2018 |
| | UA Deta , NA Lestari, M Yantidewi, Suparmi, Cari. 2018. The D-Dimensional Non-Relativistic Particle in the Scarf Trigonometry plus Non-Central Rosen-Morse Potentials. <i>Journal of Physics:</i> | 2018 |

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| | <i>Conference Series</i> 997 (1) 012014. DOI: https://doi.org/10.1088/1742-6596/997/1/012014 | | | |
| | A Nurlailiyah, UA Deta , T N Ain, MS Haq, NA Lestari, M Yantidewi. 2019. Analysis of High School Physics National Examination Questions Based on Bloom Taxonomy and National Examination Question Standard in 2017/2018. <i>Journal of Physics: Conference Series</i> 1171 (1) 012041. DOI: https://doi.org/10.1088/1742-6596/1171/1/012041 | | | 2019 |
| | M Hadi, A Husein, UA Deta . 2019. A Refractive Index in Bent Fibre Optics and Curved Space. <i>Journal of Physics: Conference Series</i> 1171 (1) 012016. DOI: https://doi.org/10.1088/1742-6596/1171/1/012016 | | | 2019 |
| | NA Lestari, UA Deta , M Yantidewi, R Firmansyah. 2019. Reinforcing Scientific Skills Based on Laboratory for Pre-Service Physics Teacher by Measurement System Understanding. <i>Journal of Physics: Conference Series</i> 1171 (1) 012049. DOI: https://doi.org/10.1088/1742-6596/1171/1/012049 | | | 2019 |
| | S Latifah, Irwandani, A Saregar, R Diani, O Fiani, Widayanti, UA Deta . 2019. How the Predict-Observe-Explain (POE) Learning Strategy Remediate Students' Misconception on Temperature and Heat Materials? <i>Journal of Physics: Conference Series</i> 1171 (1) 012051. DOI: https://doi.org/10.1088/1742-6596/1171/1/012051 | | | 2019 |
| Activities in specialist bodies | Organization | Position | Period | |
| | Physical Society of Indonesia (PSI) | Member | 2018 – Now | |
| | Relawan Jurnal Indonnesia | Member | 2018 – Now | |
| | Perkumpulan Pendidik IPA Indonesia (PPII) | Public Relation and Cooperation Team | 2019 – Now | |