



UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Mathematics Department

Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: math@ugm.ac.id Website: matematika.fmipa.ugm.ac.id

Undergraduate Programme in Mathematics

Telp : +62 274 552243

Email : maths1@ugm.ac.id; kaprodi-s1-matematika.mipa@ugm.ac.id

sekprodi-s1-matematika.mipa@ugm.ac.id

Website : <http://s1math.fmipa.ugm.ac.id/>

STAFF HANDBOOK

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|---|--|---|-------------------------|
| Name | Indah Emilia Wijayanti | | |
| Post | Algebra | | |
| Academic Career | | Institution | Year |
| | Initial Academic Appointment | Universitas Gadjah Mada | 1994 |
| | Post Doctoral | | |
| | Doctoral Degree | Heinrich Heine University of Duesseldorf, Germany | 2006 |
| | Master Degree | Universitas Gadjah Mada | 1998 |
| | Undergraduate Degree | Universitas Gadjah Mada | 1993 |
| Employment | | Position | Employer |
| | | Instructor | Universitas Gadjah Mada |
| | | Assistant Professor | Universitas Gadjah Mada |
| | | Associate Professor | Universitas Gadjah Mada |
| | | Full Professor | |
| Research and development projects over the last 5 years | <ol style="list-style-type: none"> 1. Sifat-sifat Submodul Prima-S(N) Lokal dalam Modul Multiplikasi-S(N) dan Dualisasinya (Indah Emilia Wijayanti – PI, Sri Wahyuni), Directorate Higher Education Research Project (Competence Based Research Project / Penelitian Hibah Kompetensi DIKTI) (2017), IDR. 123,349,000,00. 2. Modul KO-Bagus Sebagai Dualisasi Modul Bagus (Indah Emilia Wijayanti), Faculty of Mathematics and Natural Sciences Universitas Gadjah Mada Research Project (2017), IDR. 15,000,000. 3. Ideal Bertingkat Quasi Prima Lemah (Sutopo, Indah Emilia Wijayanti, Sri Wahyuni), Faculty of Mathematics and Natural Sciences Universitas Gadjah Mada Research Project (2017), IDR. 15,000,000. 4. Subinjectivity Domains (Sergio Lopez-Permouth - PI, Indah Emilia Wijayanti, Sergio Zamora-Erazo, Bulent Sarac), partially funding by Senior Research Program of Fulbright in Ohio University Center of Ring Theory and Applications, year 2016, grant USD 9380. 5. \star-rings and \star-modules (Indah Emilia Wijayanti – PI, Puguh Wahyu Prasetyo, Halina France-Jackson, Joe Repka), partially funding by Sandwich-like Program of DIKTI in University of Toronto, Canada, year 2016, grant CAD 3415. | | |

6. Sub-exact Sequences (**Indah Emilia Wijayanti** – PI, Fitriani, Budi Surodjo, Bijan Davvaz), year 2016.
7. Representation of Rings over Modules (Sri Wahyuni - PI, Na'imah Hijriati, **Indah Emilia Wijayanti**), year 2016.
8. Sifat-sifat Submodul Prima-S(N) Lokal dalam Modul Multiplikasi-S(N) dan Dualisasinya (**Indah Emilia Wijayanti** – PI, Sri Wahyuni), Directorate Higher Education Research Project (Competence Based Research Project / Penelitian Hibah Kompetensi DIKTI) year 2015 and 2016, total grant IDR. 235,200,000.
9. Derived Equivalence for Hopf Algebras (Intan Muchtadi Alamsyah – PI, **Indah Emilia Wijayanti**, Dellaviha Nasution, Alexander Zimmermann), Hibah Kerjasama Luar Negeri DIKTI, tahun 2016 IDR. 150,000,000.
10. Distributed Model Predictive Control for Traffic Systems with Dynamic Game Approach (Salmah-PI, **Indah Emilia Wijayanti**, Abdurakhman, Jacob Engwerda, Bart de Schutter), Hibah Kerjasama Luar Negeri dan Publikasi Internasional, DIKTI tahun 2015 dan 2016, total grant IDR. 300,000,000
11. Identitas Macwilliam pada Kode Linear Atas Daerah Integral Menggunakan Karakter yang Diperumum (**Indah Emilia Wijayanti** – PI, Arif Munandar), Faculty of Mathematics and Natural Sciences Universitas Gadjah Mada Research Project (2016), IDR. 15,000,000.
12. Penerapan Teori Radikal pada Latis Submodul dan Latis Ideal, (**Indah Emilia Wijayanti** – PI, Muhammad Ardiyansyah, Puguh Wahyu Prasetyo), Faculty of Mathematics and Natural Sciences Universitas Gadjah Mada Research Project (2015), IDR. 10,000,000.
13. Pemetaan pada Latis Submodul dan Latis Ideal Serta Hubungannya dengan Modul Komultiplikasi (**Indah Emilia Wijayanti** – PI, Muhammad Ardiyansyah), Faculty of Mathematics and Natural Sciences Universitas Gadjah Mada Research Project (2014), IDR. 10,000,000.
14. Equivalences singulières et catégories dérivées des algèbres de Hopf (Alexander Zimmermann (France, PI), Intan Muchtadi Alamsyah , Yuming Liu (China), Guodong Zhou, **Indah Emilia Wijayanti**), STIC Asie, Project ESCAP du Ministère des Affaires Etrangères de la France (France), year 2013, grant EUR 1300.
15. Clean Coalgebras (**Indah Emilia Wijayanti** – PI, Robert Wisbauer – Host Professor in Heinrich Heine University of Duesseldorf, Germany), DAAD Re-Invitation Program (Germany), grant EUR 4157.
16. Submodul Kedua pada Modul Komultiplikasi atas Ring Sebarang (**Indah Emilia Wijayanti** – PI, Laila Dini Anggraini, Lalu Irman Suhaedading), Hibah PUPTN Insentif Penelitian Mahasiswa UGM, tahun 2013, IDR. 7,500,000.
17. Modul Fraksi dari Modul Multiplikasi (**Indah Emilia Wijayanti** – PI, Uha Isnaini), Faculty of Mathematics and Natural Sciences Universitas Gadjah Mada Research Project (2013), IDR. 10,000,000.
18. Sifat-sifat submodul prima penuh (**Indah Emilia Wijayanti** - PI, Sri Wahyuni, Dian Ariesta Yuwaningsih), Directorate Higher Education Research Project (Competence Based Research Project / Penelitian Hibah Kompetensi DIKTI) year 2013, IDR. 115,000,000.

| | <p>19. Pembagian Rahasia Shamir Menggunakan Kode Linear (Indah Emilia Wijayanti-PI, Riningsih), Hibah Penelitian Kolaborasi Dosen Mahasiswa UGM tahun 2012, IDR. 6,500,000</p> <p>20. Submodul Prima dan Radikal Prima pada Modul Perkalian atas Ring Sebarang (Indah Emilia Wijayanti), Hibah Penelitian non-Kompetisi Jurusan Matematika FMIPA UGM tahun 2012, IDR. 5,000,000.</p> <p>21. R-Aljabar Bersih (Indah Emilia Wijayanti - PI, Uha Isnaini, Kartika Sari, Cyrenia Novella), Faculty of Mathematics and Natural Sciences Universitas Gadjah Mada Research Project (2011), IDR. 10,000,000.</p> <p>22. Hybrid Modeling and Control for Intelligent Unmanned Aerial Vehicle (Salmah-PI, Endra Joelianto, Indah Emilia Wijayanti, Kwang Joon Yoon, Agus Budiono), Hibah Kerjasama Luar Negeri dan Publikasi Internasional DIKTI tahun 2010, 2011 dan 2012, total grant IDR. 639,480,000</p> | | | | | | | | |
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| Industry collaborations over the last 5 years | Project title : --- Partners: --- | | | | | | | | |
| Patents and proprietary rights | <table border="1"> <thead> <tr> <th>Title</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td><i>Text book</i> : Aljabar Linear 2 (Rizky Rosjanuardi, Sri Wahyuni, Indah Emilia Wijayanti), Universitas Terbuka.</td> <td>2010</td> </tr> <tr> <td><i>Text book</i> : Dasar-Dasar Aljabar Linear dan Penggunaannya dalam Berbagai Bidang (Indah Emilia Wijayanti, Sri Wahyuni, Yeni Susanti), Gadjah Mada University Press.</td> <td>2015</td> </tr> <tr> <td><i>Text book</i> : Teori Ring dan Modul (Sri Wahyuni, Indah Emilia Wijayanti, Dian Ariesta Yuwaningsih, Ari Dwi Hartanto), Gadjah Mada University Press.</td> <td>2016</td> </tr> </tbody> </table> | Title | Year | <i>Text book</i> : Aljabar Linear 2 (Rizky Rosjanuardi, Sri Wahyuni, Indah Emilia Wijayanti), Universitas Terbuka. | 2010 | <i>Text book</i> : Dasar-Dasar Aljabar Linear dan Penggunaannya dalam Berbagai Bidang (Indah Emilia Wijayanti , Sri Wahyuni, Yeni Susanti), Gadjah Mada University Press. | 2015 | <i>Text book</i> : Teori Ring dan Modul (Sri Wahyuni, Indah Emilia Wijayanti , Dian Ariesta Yuwaningsih, Ari Dwi Hartanto), Gadjah Mada University Press. | 2016 |
| | Title | Year | | | | | | | |
| | <i>Text book</i> : Aljabar Linear 2 (Rizky Rosjanuardi, Sri Wahyuni, Indah Emilia Wijayanti), Universitas Terbuka. | 2010 | | | | | | | |
| | <i>Text book</i> : Dasar-Dasar Aljabar Linear dan Penggunaannya dalam Berbagai Bidang (Indah Emilia Wijayanti , Sri Wahyuni, Yeni Susanti), Gadjah Mada University Press. | 2015 | | | | | | | |
| <i>Text book</i> : Teori Ring dan Modul (Sri Wahyuni, Indah Emilia Wijayanti , Dian Ariesta Yuwaningsih, Ari Dwi Hartanto), Gadjah Mada University Press. | 2016 | | | | | | | | |
| Important publications over the last 5 years | <p>Selected recent publications form a total of approx.: 20 from app. 30</p> <p>Sri Wahyuni, Indah Emilia Wijayanti, Halina France-Jackson, <i>Prime essential ring that generates a special atom</i>, accepted in Bulletin of the Australian Mathematical Society.</p> <p>Fitriani, B. Surodjo, I.E. Wijayanti, <i>On Sub-exact Sequences</i>, FJMS vol. 100 no. 7, 1055 – 1065, 2016.</p> <p>Sutopo, Indah Emilia Wijayanti, Sri Wahyuni: <i>Some results on graded N-prime submodules</i>, FJMS vol. 99 no. 9, 1399 – 1408, 2016.</p> <p>A. Ismarwati, H. France-Jackson, Sri Wahyuni, I. E. Wijayanti: <i>On nice modules</i>. JP Journal of Algebra, Number Theory and Applications 05/2016; 38(3). DOI:10.17654/NT038030213</p> <p>Puguh Wahyu Prasetyo, Indah Emilia Wijayanti, Halina France-Jackson: <i>Some Special Class u Whose Upper Radical $U(u)$ Determined by u Coincides With The Upper Radical $U(*u)k$ Determined by $(*u)k$</i>. AIP Conference Proceedings 02/2016; 1707(1). DOI:10.1063/1.4940814</p> <p>Puguh Wahyu Prasetyo, Ratna Setyaningsih, Indah Emilia Wijayanti, Halina France-Jackson: <i>Some properties of prime essential rings and their generalization</i>. ADVANCES OF SCIENCE AND TECHNOLOGY FOR SOCIETY: Proceedings of the 1st International Conference on Science and Technology 2015 (ICST-2015); 07/2016</p> | | | | | | | | |

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| | <p>Indah Emilia Wijayanti, Rosi Widia Asiani, Dian Ariesta Yuwaningsih, Sri Wahyuni : <i>On $S(N)$-locally prime submodules and the dualization</i>. The 7th SEAMS-UGM International Conference on Mathematics and its Applications; 02/2016</p> |
| | <p>Diari Indriati, Widodo, Indah E. Wijayanti, Kiki A. Sugeng, Martin Bača: <i>On Total Edge Irregularity Strength of Generalized Web Graphs and Related Graphs</i>. Mathematics in Computer Science 05/2015; 9(2). DOI:10.1007/s11786-015-0221-5</p> |
| | <p>Khurul Wardati, Indah Emilia Wijayanti, Sri Wahyuni, <i>On free ideals in free algebras over a commutative ring</i>, Journal of Indonesian Mathematical Society (JIMS) Vol. 21 No. 1, 59-69, 2015.</p> |
| | <p>Dian Ariesta Yuwaningsih, Indah Emilia Wijayanti, <i>On jointly prime radicals of (R,S)-modules</i>, Journal of Indonesian Mathematical Society (JIMS) Vol. 21 No. 1, 25-34, 2015</p> |
| | <p>Indah Emilia Wijayanti: <i>On left residuals of submodules in fully multiplication modules</i>. JP Journal of Algebra, Number Theory and Applications 03/2015; 36(1). DOI:10.17654/JPANTAFeb2015_017_028</p> |
| | <p>Indah Emilia Wijayanti, <i>Endo-prime submodules in endo-multiplication modules</i>, International Mathematical Forum (IMF), Vol. 9 No. 27, 1321- 1332, 2014</p> |
| | <p>E. Herawati, M. Mursaleen, Supama, I.E. Wijayanti: <i>Order matrix transformations on some Banach lattice valued sequence spaces</i>. Applied Mathematics and Computation 11/2014; 247. DOI:10.1016/j.amc.2014.09.019</p> |
| | <p>K. Wardati, I.E. Wijayanti, S. Wahyuni: <i>On primeness of path algebras over a unital commutative ring</i>. JP Journal of Algebra, Number Theory and Applications 09/2014; 34(2).</p> |
| | <p>D. Indriati, Widodo, I.E. Wijayanti, K.A. Sugeng: <i>On the total edge irregularity strength of gear and related graphs</i>. Far East Journal of Mathematical Sciences 07/2014; 90(1).</p> |
| | <p>Halina France-Jackson, Sri Wahyuni, Indah Emilia Wijayanti: <i>Radical related to special atoms revisited</i>. Bulletin of the Australian Mathematical Society 04/2014; 91(02). DOI:10.1017/S0004972714000811</p> |
| | <p>Diari Indriati, Widodo, Indah Emilia Wijayanti, Kiki Ariyanti Sugeng: <i>On the total edge irregularity strength of generalized helm</i>. AKCE International Journal of Graphs and Combinatorics 08/2013; 10(2).</p> |
| | <p>Elvina Herawati, Supama, Indah Emilia Wijayanti , <i>The locally boundedness criteria for superposition operator on $l_\phi(L)$</i> , Applied Mathematical Sciences, Vol. 7 no. 15, 727-733. 2013</p> |
| | <p>Indah Emilia Wijayanti, <i>On Product of N-Cogroup</i>, Journal of Indonesian Mathematical Society (JIMS) Vol. 18 No. 2, 101-111, 2012</p> |
| | <p>J. C. Engwerda, S. Salmah, I. E. Wijayanti: <i>The (multi-player) linear quadratic state feedback control problem for index one descriptor systems</i>. Journal of the Franklin Institute 12/2011; 348(10). DOI:10.1016/j.jfranklin.2011.10.002</p> |

| Activities in specialist | Organization | Role | Period |
|---|--|---|-------------|
| bodies over the last 5 years <i>(Membership without a specific role need not be mentioned)</i> | Indonesian Mathematical Society | Secretary | 2010 - 2012 |
| | Indonesian Mathematical Society | Coordinator of Algebra Research Group | 2012 – 2014 |
| | Indonesian Mathematical Society | Coordinator of Division of Research Development | 2014 - 2016 |
| | Himpunan Peminat Aljabar (Indonesian Algebraic Society) | Chair | 2007 – 2011 |
| | Komunitas Peminat Aljabar (Indonesian Algebraic Society) | Co-Chair | 2014 – 2017 |