

Curriculum vitae

PERSONAL INFORMATION



Bor Kos

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Gender Male | Nationality Slovenian

POSITION R&D Associate

WORK EXPERIENCE

October 2021 – **R&D Associate - Radiation Transport Group, Nuclear Energy and Fuel Cycle Division**

Oak Ridge National Laboratory, 1 Bethel Valley Road, Oak Ridge, TN, USA

- Radiation shielding analysis for fusion applications
- ITER, JET and DEMO shielding, streaming and shutdown dose rate analysis
- Working with programs for neutron/gamma transport and analysis e.g. MCNP, ADVANTG, Shift, Denovo.
- Collaborating on US DOE - EURATOM fusion projects including, JET3, PrIO and DEMO.
- CAD model preparation/modification for nuclear analysis usign CUBIT and SpaceClaim
- CAD-to-CSG conversion with McCAD

June 2021 – October 2021 **Assistant R&D Staff Member - Radiation Transport Group, Nuclear Energy and Fuel Cycle Division**

Oak Ridge National Laboratory, 1 Bethel Valley Road, Oak Ridge, TN, USA

- Radiation shielding analysis for fusion applications
- ITER, JET and DEMO shielding, streaming and shutdown dose rate analysis
- Working with programs for neutron/gamma transport and analysis e.g. MCNP, ADVANTG, Shift, Denovo.
- Collaborating on US DOE - EURATOM fusion projects including, JET3, PrIO and DEMO.
- CAD model preparation/modification for nuclear analysis usign CUBIT and SpaceClaim
- CAD-to-CSG conversion with McCAD

February 2020 – June 2021 **Assistant researcher with PhD**

Jožef Stefan Institute, Reactor Physics division, Jamova cesta 39, 1000 Ljubljana, Slovenia

- Work package 1 leader of European commission funded TOURR project (<https://enen.eu/index.php/portfolio/tourr-project/>).
- Coordination of research projects funded by Slovenian Research Agency such as: Stability of nuclear reactors in load follow mode of operation.
- Mentoring of undergraduate and bachelors students at Faculty of Mathematics and Physics.
- Coordinator of Nuclear Data subproject of EUROfusion Breeding blanket project for JSI.
- Nuclear data uncertainty propagation and sensitivity calculations with SUS3D and SANDY.
- Fusion (JET, DEMO, TCV) and fission (JSI TRIGA mk.2, Krško NPP) radiation shielding analysis.
- Shielding benchmark nuclear data sensitivity/uncertainty analyses.
- Working with programs for neutron transport and analysis e.g. MCNP, ADVANTG, ATTILA, PARTISN, Denovo.
- Nuclear data processing using NJOY (99,2012 and 2016) and TRANSX.
- CAD model conversion to models for particle transport.
- Development of dedicated code for CAD-to-MCNP conversion - GRASP.

September 2015 – February 2020 **Empoyment/PhD student**
Jožef Stefan Institute, Reactor Physics division, Jamova cesta 39, 1000 Ljubljana, Slovenia

- Nuclear data uncertainty propagation and sensitivity calculations with SUSD3D and SANDY.
- Fusion (JET, DEMO) and fission (JSI TRIGA mk.2, Krško NPP) radiation shielding analysis.
- Shielding benchmark nuclear data sensitivity/uncertainty analyses.
- Working with programs for neutron transport and analysis e.g. MCNP, ADVANTG, ATTILA, PARTISN, Denovo.
- Nuclear data processing using NJOY (99,2012 and 2016) and TRANSX.
- Nuclear data processing and validation.
- CAD model conversion to models for particle transport.
- Development of dedicated code for CAD-to-MCNP conversion - GRASP.

September 2016 – December 2016 **GENTLE grant student**

- Joint Research Centre of the European Commission, Retieseweg 111, B-2440 Geel, Belgium
- Training in nuclear data processing (NJOY), validation and evaluation.
 - Development of a MCNP and deterministic neutron transport model of the LMT-006 criticality benchmark experiment for validating nuclear data libraries.
 - Using MCNP, NJOY, DICE, JANIS, EXFOR, IRPHE, ICSBEP.

March 2015 – September 2015 **MSc student researcher**

- Jožef Stefan Institute, Reactor Physics division, Jamova cesta 39, 1000 Ljubljana, Slovenia
- Working with MCNP for neutron transport calculations
 - Neutron dose calculations.
 - Using CAD software, e.g. Rhinoceros 3D, for CAD model conversions.

November 2014 – March 2015 **Laboratory assistant**

- SIQ: Slovenian Institute of Quality and Metrology, Tržaška cesta 2, 1000 Ljubljana, Slovenia
- Assistant in a metrological laboratory.
 - MATLAB programming.

January 2013 – September 2014 **Member of the administrative board of the Student organization of the Faculty of Mathematics and Physics**

- Faculty of Mathematics and Physics, Jadranska ulica 19, 1000 Ljubljana, Slovenia
- Project management.
 - Administration work.
 - Overseeing the finance of the Student organization.
 - Overseeing projects.

AWARDS

- 2016 NENE Young Author Award. In the appreciation of outstanding work, effort and enthusiasm shown in the preparation and presentation of the paper entitled: *Variance reduction of fusion and fission transport problems using the ADVANTG hybrid code.*
- 2017 NENE Best poster award - co-author of paper entitled: *Characterization of Neutron Field in the TRIGA Irradiation Facilities Inside and Outside the Biological Shield*
- 2018 JRC (Joint Research Centre of the European Commission) Annual Award for scientific Excellence in 2018 - co-author of paper entitled: *Evaluation of cross section data for neutron induced reaction on ^{238}U in the resonance region.*
- 2020 NENE Best poster award - author of paper entitled: *TCV Tokamak Neutron Shielding Assessment and Upgrade*

EDUCATION AND TRAINING

2015 – 2020 **Third cycle degree (PhD), Nuclear engineering**

Finish date February 24th 2020

Doctoral program Mathematics and Physics, subprogram Physics, module Nuclear engineering
Faculty of Mathematics and Physics, Jadranska ulica 19, 1000 Ljubljana, Slovenia
Thesis title: *Use of hybrid methods for neutron transport and sensitivity analysis.*

Advisor: dr. Ivan Aleksander Kodeli (JSI)

Co-advisor: dr. Scott W. Mosher (LANL/ORNL)

Research includes: Using hybrid methods for neutron transport, sensitivity analysis using random sampling and perturbation based codes, nuclear data processing and validation, development of benchmark models (shielding, criticality), CAD modelling, CAD-to-MCNP conversion, CAD-to-deterministic conversion, etc.

2012 – 2015 Second cycle degree (MSc), Nuclear engineering

Faculty of Mathematics and Physics, Jadranska ulica 19, 1000 Ljubljana, Slovenia

Thesis title: *Determining neutron dose fields around a pressurized water reactor*

Highest achieved level of education, title: Master of Science Nuclear Engineering, MSNE

Advisor: doc. dr. Luka Snoj

2008 – 2012 First cycle degree (BSc), Physics

Faculty of Mathematics and Physics, Jadranska ulica 19, 1000 Ljubljana, Slovenia

Title: Bachelor of Science, BSc

2004 – 2008 High School Jesenice

Secondary school, general knowledge in natural and social sciences.

Final grade 31/34. Golden Matura award - Awarded by the Ministry of Education, Science and Sport for exceptional performance on the final matura examination (cum laude).

PERSONAL SKILLS

Mother tongue Slovenian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
German	A2	A2	A1	A1	A1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
[Common European Framework of Reference for Languages](#)

Organisational / managerial skills

- While working for the Student organization of the Faculty of Mathematics and Physics I organized and oversaw at least 20 projects.
- I am an active member of my community and help organize different social events, such as the annual traditional bonfire night.

Computer skills

- Expert: NJOY, MCNP, ADVANTG, Denovo, Partisn, TRANSX, Rhino 3D, SpaceClaim, CATIA, SANDY, SUSD3D, Python, GRASP, CUBIT, McCAD
- Intermediate: VisIt, Vised, LATEX, Microsoft Office, Matlab, Origin, ParaView
- Basic: Fortran, SolidWorks, Voxler, Corel Draw

Driving licence A, B

Personal interests Enjoy the great outdoors particularly hiking, mountaineering, ski touring and mountain biking. Love to travel and experience different new cultures and natural beauties.

2015 - 2022 Bibliography - selected contributions

ORIGINAL ARTICLES

1. PLANT, A. G., KOS, Bor, JAZBEC, Anže, SNOJ, Luka, NAJDANOVIĆ-VISAK, V., JOYCE, M. J. Nuclear-driven production of renewable fuel additives from waste organics. *Communications chemistry*. 2021, vol. 4, art. 132, 15 str. ISSN 2399-3669. DOI: 10.1038/s42004-021-00572-5. [COBISS.SI-ID 77586435]
2. KOS, Bor, ČUFAR, Aljaž, KODELI, Ivan Aleksander. ASUSD nuclear data sensitivity and uncertainty program package : Validation on fusion and fission benchmark experiments. *Nuclear Engineering and Technology*. [in press] 2021, 9 str. ISSN 1738-5733. DOI: 10.1016/j.net.2021.01.034. [COBISS.SI-ID 57546755], [JCR, SNIP]
3. KOS, Bor, SJOSTRAND, H., KODELI, Ivan Aleksander, ČUFAR, Aljaž, DRENIK, Aleksander, LENGAR, Igor, ŠTANCAR, Žiga, SNOJ, Luka, et al., JET Contributors. Nuclear data uncertainty propagation in complex fusion geometries. *Journal of nuclear engineering*. 2020, vol. 1, no. 1, str. 63-69. ISSN 2673-4362. DOI: /10.3390/jne1010006. [COBISS.SI-ID 41490947]
4. JAZBEC, Anže, KOS, Bor, AMBROŽIČ, Klemen, SNOJ, Luka. Dose rate calculations at beam tube no. 5 of the JSI TRIGA mark II research reactor using Monte Carlo method. *Applied Radiation and Isotopes*. [Print ed.]. 2021, vol. 168, art. 109510, str. 1-14. ISSN 0969-8043. DOI: 10.1016/j.apradiso.2020.109510. [COBISS.SI-ID 39260163], [JCR, SNIP, WoS, Scopus do 17. 3. 2021: št. citatov (TC): 1, čistih citatov (CI): 1]
5. ŽOHAR, Andrej, LENGAR, Igor, NOCENTE, M., SNOJ, Luka, ŠTANCAR, Žiga, KODELI, Ivan Aleksander, ČUFAR, Aljaž, DRENIK, Aleksander, KOS, Bor, et al., JET Contributors. Modelling of plasma gamma ray sources in large tokamaks. *Fusion engineering and design*. [Print ed.]. 2021, vol. 163, art. 112158, 12 str. ISSN 0920-3796. DOI: 10.1016/j.fusengdes.2020.112158. [COBISS.SI-ID 43921411], [JCR, SNIP, WoS, Scopus]
6. KOTNIK, Domen, KOS, Bor, LENGAR, Igor, ČUFAR, Aljaž, BACHMANN, Christian, SNOJ, Luka. Assessment of sky-shine in DEMO during breeding blanket maintenance. *Fusion engineering and design*. [Print ed.]. 2021, vol. 167, str. 1-5. ISSN 0920-3796. DOI: 10.1016/j.fusengdes.2021.112348. [COBISS.SI-ID 54620163], [JCR, SNIP]
7. NAISH, J., BATISTONI, P., KOS, Bor, OBRYK, B., VILLARI, R., VASILOPOULOU, T., STAMATELATOS, I., ČUFAR, Aljaž, DRENIK, Aleksander, KODELI, Ivan Aleksander, LENGAR, Igor, ŠTANCAR, Žiga, SNOJ, Luka, et al., JET Contributors. Comparison of neutron flux streaming calculations to the 2019-2020 JET experimental deuterium-deuterium results. *Fusion engineering and design*. [Print ed.]. 2021, vol. 170, art. 112538, 9 str. ISSN 0920-3796. DOI: 10.1016/j.fusengdes.2021.112538. [COBISS.SI-ID 58533891], [JCR, SNIP]
8. JAZBEC, Anže, PUNGERČIČ, Anže, KOS, Bor, AMBROŽIČ, Klemen, SNOJ, Luka. Delayed gamma radiation simulation in case of loss of water event using Monte Carlo method. *Nuclear Engineering and Design : international journal devoted to the thermal, mechanical and structural problems of nuclear energy*. [Print ed.]. 2021, vol. 378, art. 111170, 12 str. ISSN 0029-5493. DOI: 10.1016/j.nucengdes.2021.111170. [COBISS.SI-ID 57537539], [JCR, SNIP]

9. KOTNIK, Domen, KOS, Bor, ČALIĆ, Dušan, SNOJ, Luka. Use of ADVANTG to analyse skyshine [gamma]-dose rates around a silo type LILW repository. *Annals of Nuclear Energy*. [Print ed.]. 2020, vol. 145, art. 107585, 20 str. ISSN 0306-4549. DOI: /10.1016/j.anucene.2020.107585. [COBISS.SI-ID 19179011], [JCR, SNIP, WoS, Scopus do 20. 3. 2021: št. citatov (TC): 1, čistih citatov (CI): 1]
10. PLOMPEN, A.J.M., CABELLOS, O., SAINT-JEAN, C. de, FLEMING, M., ALGORA, A., ANGELONE, M., ARCHIER, P., BAUGE, E., BERSILLON, O., KODELI, Ivan Aleksander, KOS, Bor, TRKOV, Andrej, ŽEROVNIK, Gašper, et al. The joint evaluated fission and fusion nuclear data library, JEFF-3.3. *European physical journal. A, Hadrons and nuclei*. 2020, vol. 56, art. 181, 108 str. ISSN 1434-601X. DOI: /10.1140/epja/s10050-020-00141-9. [COBISS.SI-ID 22761219], [JCR, SNIP, WoS do 21. 4. 2021: št. citatov (TC): 16, čistih citatov (CI): 16, Scopus do 14. 4. 2021: št. citatov (TC): 21, čistih citatov (CI): 21]
11. KOS, Bor, MOSHER, Scott W., KODELI, Ivan Aleksander, GROVE, Robert E., NAISH, Jonathan, OBRYK, Barbara, VILLARI, Rosaria, BATISTONI, Paola and JET Contributors. Application of ADVANTG to the JET3 - NEXP streaming benchmark experiment. *Fusion engineering and design*. [Print ed.]. 2019, vol. 147, pp. 1-10. ISSN 0920-3796. DOI: 10.1016/j.fusengdes.2019.111252
12. KOTNIK, Domen, KOS, Bor, MOSHER, Scott W., GROVE, R. E., SNOJ, Luka. Validation and evaluation of the ADVANTG code on the ICSBEP skyshine benchmark experiment. *Annals of Nuclear Energy*, ISSN 0306-4549. [Print ed.], 2019, vol. 125, str. 249-260, doi: 10.1016/j.anucene.2018.11.025.
13. GORIČANEC, Tanja, KOS, Bor, ŽEROVNIK, Gašper, MARSHALL, M. A., KODELI, Ivan Aleksander, LENGAR, Igor, ŠTANCAR, Žiga, BESS, John D., HEINRICHS, D. P., KIM, S.J., ZERKLE, M. L., SNOJ, Luka. Evaluation of the criticality and reaction rate benchmark experiments utilizing UO₂F₂ aqueous solution of intermediate enrichment in spherical geometry at ORNL. *Progress in Nuclear Energy*, ISSN 0149-1970. [Print ed.], 2019, vol. 111, str. 97-108, doi: 10.1016/j.pnucene.2018.10.024.
14. KOTNIK, Domen, ČUFAR, Aljaž, KOS, Bor, SNOJ, Luka. Validation and evaluation of the ADVANTG hybrid code on the ICSBEP labyrinth benchmark experiment. *Annals of Nuclear Energy*, ISSN 0306-4549. [Print ed.], 2018, april, vol. 114, page 464-481, doi: /10.1016/j.anucene.2017.12.011.
15. ROYSTON, Katherine E., JOHNSON, Seth R., EVANS, T. M., MOSHER, Scott W., NAISH, J., KOS, Bor, ČUFAR, Aljaž, DRENIK, Aleksander, KODELI, Ivan Aleksander, LENGAR, Igor, SNOJ, Luka, et al., JET Contributors. Application of the Denovo discrete ordinates radiation transport code to large-scale fusion neutronics. *Fusion science and technology*, ISSN 1943-7641, 2018, vol. 74, page 303-314, doi: 10.1080/15361055.2018.1504508.
16. SIRAKOV, I., CAPOTE, R., GRITZAY, O., KIM, H. I., KOPECKY, S., KOS, Bor, PARADELA, C., SCHILLEBEECKX, P., TRKOV, Andrej. Evaluation of cross sections for neutron interactions with Fsup[238]U in the energy region between 5 keV and 150 keV. *The european physical journal. A, Hadrons and nuclei*, ISSN 1434-6001, 2017, vol. 53, iss. 10, 1-11 page, doi: 10.1140/epja/i2017-12394-2.

17. ČUFAR, Aljaž, KOS, Bor, KODELI, Ivan Aleksander, LENGAR, Igor, ŠTANCAR, Žiga, SNOJ, Luka. The analysis of the external neutron monitor responses in a simplified JET-Like Tokamak using ADVANTG. *Fusion science and technology*, 2017, iss. 2, vol. 71, page 162-176.

PUBLISHED CONFERENCE CONTRIBUTIONS

1. KOS, Bor, KODELI, Ivan Aleksander, FIORITO, L., ŽEROVNIK, Gašper. Nuclear data uncertainty analysis of the TIARA iron benchmark using the random sampling code SANDY accelerated by the ADVANTG hybrid transport code. V: *PHYSOR 2018*, PHYSOR 2018, Reactor physics paving the way towards more efficient systems, 22 - 26 April 2018, Cancun. Cancun: ANS. 2018, 12 page
2. ČALIĆ, Dušan, KOS, Bor, ŽEROVNIK, Gašper, STANKOVSKY, A. Nuclear data uncertainties of the BEAVRS benchmark core. V: JENČIČ, Igor (ur.). *Proceedings*, 27th International Conference Nuclear Energy for New Europe - NENE 2018, Portorož, Slovenia, September 10-13. Ljubljana: Nuclear Society of Slovenia. 2018, 8 page
3. KOS, Bor, KODELI, Ivan Aleksander. Coupling of the SUS3D S/U code with the Denovo deterministic transport solver. V: JENČIČ, Igor (ur.). *Proceedings*, 27th International Conference Nuclear Energy for New Europe - NENE 2018, Portorož, Slovenia, September 10-13. Ljubljana: Nuclear Society of Slovenia. 2018, 9 page
4. AMBROŽIČ, Klemen, KOS, Bor, SNOJ, Luka. JSIR2S code system for delayed radiation field calculations. V: JENČIČ, Igor (ur.). *Proceedings*, 27th International Conference Nuclear Energy for New Europe - NENE 2018, Portorož, Slovenia, September 10-13. Ljubljana: Nuclear Society of Slovenia. 2018, 9 page
5. KOS, Bor, KODELI, Ivan Aleksander. Določevanje negotovosti zaradi jedrskih podatkov z ključnim vzorčenjem in determinističnimi metodami. V: ŽOHAR, Andrej (ur.), AMBROŽIČ, Klemen. *Zbornik 5. konference mladih jedrskih strokovnjakov : povzetki prispevkov, predstavljenih na konferenci v Rektorskem centru Podgorica, 26. 2. 2018*. 1. izd. Ljubljana: Društvo jedrskih strokovnjakov Slovenije. 2018, page 32.
6. KOTNIK, Domen, KOS, Bor, ČUFAR, Aljaž, SNOJ, Luka. Validacija in evaluacija računalniškega programa ADVANTG na referenčnem eksperimentu "Skyshine". V: ŽOHAR, Andrej (ur.), AMBROŽIČ, Klemen. *Zbornik 5. konference mladih jedrskih strokovnjakov : povzetki prispevkov, predstavljenih na konferenci v Rektorskem centru Podgorica, 26. 2. 2018*. 1. izd. Ljubljana: Društvo jedrskih strokovnjakov Slovenije. 2018, page 37.
7. AMBROŽIČ, Klemen, KOS, Bor, JAZBEC, Anže, RADULOVIC, Vladimir, SNOJ, Luka. Characterization of neutron fields in the TRIGA irradiation facilities inside and outside the biological shield. V: CIZELJ, Leon (ur.), HOLLER, Tadej (ur.). *Proceedings*, 26th International Conference Nuclear Energy for New Europe - NENE 2017, Bled, Slovenia, September 11-14. Ljubljana: Društvo jedrskih strokovnjakov Slovenije: = Nuclear Society of Slovenia. 2017, 8 page
8. KOS, Bor, RADULOVIC, Vladimir, KODELI, Ivan Aleksander. Results of EURADOS Exercise On Neutron Spectrum Unfolding in Bonner Sphere Spectrometry Using GRUPINT. V: CIZELJ, Leon (ur.), HOLLER, Tadej (ur.). *Proceedings*, 26th International Conference Nuclear Energy for New Europe - NENE 2017, Bled, Slovenia, September 11-14. Ljubljana: Društvo jedrskih strokovnjakov Slovenije: = Nuclear Society of Slovenia. 2017, 8 page

9. KOTNIK, Domen, KOS, Bor, SNOJ, Luka. Validation of the ADVANTG code on the ICSBEP Skyshine Benchmark. V: CIZELJ, Leon (ur.), HOLLER, Tadej (ur.). *Proceedings*, 26th International Conference Nuclear Energy for New Europe - NENE 2017, Bled, Slovenia, September 11-14. Ljubljana: Društvo jedrskih strokovnjakov Slovenije: = Nuclear Society of Slovenia. 2017, 8 page
10. KOS, Bor, SNOJ, Luka. On using Grasshopper add-on for CAD to MCNP conversion. V: *PHYSOR 2016, The physics of reactor meeting*, PHYSOR 2016, The physics of reactor meeting, Unifying theory and experiment in the 21st century, May 1-5, 2016, Sun Valley, Idaho. Sun Valley: American Nuclear Society. 2016, 10 page
11. KOS, Bor, KODELI, Ivan Aleksander. Variance reduction of fusion and fission neutron transport problems using the ADVANTG hybrid code. V: SNOJ, Luka (ur.), LENGAR, Igor (ur.). *Proceedings*, 25th International Conference Nuclear Energy for New Europe - NENE 2016, Portorož, Slovenia, September 5-8, 2016. Ljubljana: Nuclear Society of Slovenia. 2016, 7 page
12. KOS, Bor, KROMAR, Marjan, ŠTANCAR, Žiga, SNOJ, Luka, KLENOVŠEK, Peter. Neutron streaming analysis and shielding determination for the Krško nuclear power plant. V: SNOJ, Luka (ur.), LENGAR, Igor (ur.). *Proceedings*, 25th International Conference Nuclear Energy for New Europe - NENE 2016, Portorož, Slovenia, September 5-8, 2016. Ljubljana: Nuclear Society of Slovenia. 2016, 8 page
13. KOS, Bor. Hibridne kode za transport delcev. V: AMBROŽIČ, Klemen. *Zbornik 3. konference mladih z Odseka za reaktorsko fiziko (F8) Instituta Jožef Stefan : povzetki prispevkov, predstavljenih na konferenci v Reaktorskem centru Podgorica, 29. februarja 2016*. 1. izd. Ljubljana: Institut Jožef Stefan. 2016, page 59-64.

PUBLISHED CONFERENCE CONTRIBUTIONS ABSTRACTS

1. KOS, Bor. Hibridne metode za simulacijo transporta nevtronov. V: OSTERMAN, Natan (ur.), ŠKARABOT, Miha (ur.). *Zbornik povzetkov*, 11. konferenca fizikov v osnovnih raziskavah, Dobrna, 23. november 2018. V Ljubljani: Fakulteta za matematiko in fiziko. 2018.
12. KOS, Bor. Izračun nevtronske fluence na eksperimentalnih pozicijah z Monte Carlo in determinističnimi kodami. V: AMBROŽIČ, Klemen (ur.), KOS, Bor (ur.), GORIČANEC, Tanja (ur.). *Zbornik 4. konference mladih z Odseka za reaktorsko fiziko (F8) Instituta "Jožef Stefan" : povzetki prispevkov, predstavljenih na konferenci v Reaktorskem centru Podgorica, 27. februarja 2017*. 1. izd. Ljubljana: Institut "Jožef Stefan". 2017, page 57-60, ilustr.
13. KOS, Bor, KODELI, Ivan Aleksander. Analysis of ADVANTG input parameter variations on the NEXP streaming banchmark. V: *Abstracts*, 11th ITER neutronics meeting, 23rd-27th May, 2016, Karlsruhe. Karlsruhe: Karlsruher Institut für Technologie. 2016.
14. KOS, Bor, SNOJ, Luka. On using open source Grasshopper add for CAD to MCNP conversion. V: *Abstracts*, 11th ITER neutronics meeting, 23rd-27th May, 2016, Karlsruhe. Karlsruhe: Karlsruher Institut für Technologie. 2016.

MASTERS THESIS

1. KOS, Bor. *Izračun doznega polja nevtronov v okolici reaktorja tlačnovodne jedrske elektrarne: magistrsko delo*. Ljubljana: [B. Kos], 2015. XIII, 73 page, ilustr.

DOCTORAL THESIS

2. KOS, Bor. *Use of hybrid methods for neutron transport and sensitivity analysis : doctoral thesis*. Ljubljana: [B. Kos], 2020. XXVIII, 231 str., ilustr. <https://repozitorij.uni-lj.si/IzpisGradiva.php?id=114388&lang=slv>. [COBISS.SI-ID 3411300]

ANALYSIS, PRE-ANALYSIS AND REPORTS

1. ŽOHAR, Andrej, KOS, Bor, LENGAR, Igor, SNOJ, Luka. *Determination of attenuation of gamma rays, DD and DT neutrons in LiH with MCNP*. Ljubljana: Inštitut Jožef Stefan, 2021. 21 str. IJS delovno poročilo, 13492. [COBISS.SI-ID 60762883]
2. KOS, Bor, NAISH, J., KODELI, Ivan Aleksander. *C/E comparison of DD campaign results - Technical report*. Ljubljana: Inštitut Jožef Stefan, 2020. 29 str. IJS delovno poročilo, 13411. [COBISS.SI-ID 52258819]
3. KOS, Bor, KODELI, Ivan Aleksander. *Final planning of experiments for DT campaign and update of computational models : MCNP JET3-NEXP streaming model history - Technical report*. Ljubljana: Inštitut Jožef Stefan, 2020. 19 str. IJS delovno poročilo, 13316. [COBISS.SI-ID 52257027]
4. GORIČANEC, Tanja, KOS, Bor, ŠTANCAR, Žiga, KROMAR, Marjan, SNOJ, Luka. *3D CAD and MCNP model of the reactor core, reactor vessel and reactor vessel internal structures of the Krško nuclear power plant*, (IJS delovno poročilo, 12490). Ljubljana: Inštitut Jožef Stefan, 2018. 158 page
5. RADULOVIĆ, Vladimir, GORIČANEC, Tanja, KOS, Bor, AMBROŽIČ, Klemen. *Report on experimental tests of a combined SPND and thermocouple sensor for the DISCOMS project at the JSI TRIGA reactor*, (IJS delovno poročilo, 12547). Ljubljana: Inštitut Jožef Stefan, 2018. 98 page
6. PLEVNIK, Lucijan, ŽEROVNIK, Gašper, KOS, Bor, SNOJ, Luka. *A computer code for generating idealized nuclear data*, (IJS delovno poročilo, 12357). Ljubljana: Inštitut Jožef Stefan, 2017. 79 page
7. KOS, Bor, KODELI, Ivan Aleksander. *Comparison of measurements from 2016 DD campaign with calculations + pre-analyses TT*, (IJS delovno poročilo, 12362). Ljubljana: Inštitut Jožef Stefan, 2017. 22 page
8. VAVTAR, Ingrid, KOS, Bor, SNOJ, Luka. *Validation of TRIGA Mark II reactor model in open source program OpenMC using experiments and MCNP code*, (IJS delovno poročilo, 12440). Ljubljana: Inštitut Jožef Stefan, 2017. 118 page
9. TISELJ, Iztok, VAVTAR, Ingrid, GAZVODA, Žiga, KOKALJ, Janez, ZAVODNIK, Jan, KOS, Bor, GARRIDO, Oriol Costa, FABJAN, Ljubo, et al.. *3D CAD model reaktorske posode Elektrarne Krško 3D CAD model reaktorske posode elektrarne Krško*, (IJS delovno poročilo, 12153). 2016.
10. KOS, Bor, KODELI, Ivan Aleksander. *Calculations of neutron fluence at experimental positions with Monte Carlo and deterministic codes*, (IJS delovno poročilo, 12232). Ljubljana: Inštitut Jožef Stefan, 2016. 24 page

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12. KOS, Bor, SCHILLEBEECKX, P., ŽEROVNIK, Gašper, KODELI, Ivan Aleksander. *MCNP modelling of the LMT 006 integral criticality benchmark experiment*, (IJS delovno poročilo, 12231). Ljubljana: Inštitut Jožef Stefan, 2016. 20 page
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