

## Výběr z publikací činnosti za rok 2019

### Články v impaktovaných časopisech včetně impaktového faktoru

ABDUJABBAROV, A.; HAKIMOV, A.; TURIMOV, B.; TURSUNOV, A.:Effects of geometric optics in conformal Weyl gravity. *Arabian Journal of Mathematics*, 8(4), pp. 259–267, special issue. DOI: 10.1007/s40065-019-0257-5. IF2018:neuveden na WoS.

ARAI, M.; BLASCHKE, F.; ETO, M.; SAKAI, N.:Massless bosons on domain walls: Jackiw-Rebbi-like mechanism for bosonic fields. *Physical Review D*, 100(9):095014. DOI: 10.1103/PhysRevD.100.095014. IF2018:4,368 (Q1).

BAKALA, P.; DE FALCO, V.; BATTISTA, E.; GOLUCHOVÁ, K.; LANČOVÁ, D.; FALANGA, M.; STELLA, L.:Three-dimensional general relativistic Poynting-Robertson effect. II. Radiation field from a rigidly rotating spherical source. *Physical Review D*, 100(10):104053. DOI: 10.1103/PhysRevD.100.104053. IF2018:4,368 (Q1).

BREUS, V.; PETRIK, K.; ZOLA, S.:Detection of white dwarf spin period variability in the intermediate polar V2306 Cygni. *Monthly Notices of the Royal Astronomical Society*, 488(4), pp. 4526-4529. DOI:10.1093/mnras/stz2062. IF2018:5,231 (Q1).

CASADIO, R.; CONTRERAS, E.; OVALLE, J.; SOTOMAYOR, A.; STUHLÍK, Z.:Isotropization and change of complexity by gravitational decoupling. *European Physical Journal C*, 79(10):826. DOI:10.1140/epjc/s10052-019-7358-3 IF2018:4,843 (Q1).

CREMASCHINI, C.; TESSAROTTO, M.:Hamilton-Jacobi Wave Theory in Manifestly-Covariant Classical and Quantum Gravity. *Symmetry-Basel*, 11(4):592. DOI: 10.3390/sym11040592. IF2018:2,143 (Q2).

DE FALCO, V.; BAKALA, P.; BATTISTA, E.; LANČOVÁ, D.; FALANGA, M.; STELLA, L.:Three-dimensional general relativistic Poynting-Robertson effect: Radial radiation field. *Physical Review D*, 99(2):023014. DOI:10.1103/PhysRevD.99.023014. IF2018:4,368 (Q1).

DE FALCO, V.; BATTISTA, E.:Analytical Rayleigh potential for the general relativistic Poynting-Robertson effect. *EPL*, 127(3):30006. DOI: 10.1209/0295-5075/127/30006. IF2018:1,886 (Q2).

DE ROSA, A.; UTTLEY, P.; GOU, L. J.; Liu, Y.; BAMBI, C.; BARRET, D.; BELLONI, T.; BERTI, E.; BIANCHI, S.; CAIAZZO, I.; CASELLA, P.; FEROCI, M.; FERRARI, V.; GUALTIERI, L.; HEYL, J.; INGRAM, A.; KARAS, V.; LU, F.J.; LUO, B.; MATT, G.; MOTTA, S.; NEILSEN, 77J.; PANI, P.; SANTANGELO, A.; SHU, X. W.; WANG, J. F.; WANG, J. M.; XUE, Y. Q.; XU, Y. P.; YUAN, W.M.; YUAN, Y. F.; ZHANG, S. N.; ZHANG, S.; AGUDO, I.; AMATI, L.; ANDERSSON, N.; BAGLIO, C.; BAKALA, P.; BAYKAL, A.; BHATTACHARYYA, S.; BOMBACI, I.; BUCCIANTINI, N.; CAPITANIO, F.; CIOLFI, R.; CUI, W. K.; D'AMMANDO, F.; DAUSER, T.; DEL SANTO, M.; DE MARCO, B.; DI SALVO, T.; DONE, C.; DOVCIAK, M.; FABIAN, A. C.; FALANGA, M.; GAMBINO, A. F.; GENDRE, B.; GRINBERG, V.; HEGER, A.; HOMAN, J.; IARIA, R.; JIANG, J. C.; JIN, C. C.; KOERDING, E.; LINARES, M.; LIU, Z.; MACCARONE, T. J.; MALZAC, J.; MANOUSAKIS,A.; MARIN, F.; MARINUCCI, A.; MEHDIPOUR, M.; MENDEZ, M.; MIGLIARI, S.; MILLER, C.; MINIUTTI, G.; NARDINI, E.; O'BRIEN, P. T.; OSBORNE, J. P.; PETRUCCI, P. O.; POSSENTI, A.; RIGGIO, A.; RODRIGUEZ, J.; SANNA, A.; SHAO, L. J.; SOBOLEWSKA, M.; ŠRÁMKOVÁ, E.; STEVENS, A. L.; STIELE, H.; STRATTA, G.; STUHLÍK, Z.; SVOBODA, J.; TAMBURINI, F.; TAURIS, T. M.; TOMBESI, F.; TÖRÖK, G.; URBANEC, M.; VINCENT, F.; WU, Q. W.; YUAN, F.; IN'T ZAND, J. J. M.; ZDZIARSKI, A. A.; ZHOU, X. L.:Accretion in strong field gravity with EXTP. *Science China–Physics Mechanics & Astronomy*, 62(2):029504, special issue. DOI: 10.1007/s11433-018-9297-0. IF2018:3,986 (Q1).

GABBANELLI, L.; OVALLE, J.; SOTOMAYOR, A.; STUCHLÍK, Z.; CASADIO, R.:A causal Schwarzschild-deSitter interior solution by gravitational decoupling. European Physical Journal C, 79(6):486. DOI:10.1140/epjc/s10052-019-7022-y. IF2018:4,843 (Q1)

GOLUCHOVÁ, K.; TÖRÖK, G.; ŠRÁMKOVÁ, E. S.; ABRAMOWICZ, M. A.; STUCHLÍK, Z.; HORAK, J.:Mass of the active galactic nucleus black hole XMMUJ134736.6+173403. Astronomy & Astrophysics, 622:L8. DOI:10.1051/0004-6361/201834774. IF2018:6,209 (Q1)

GRIGORENKO, L. V.; SHARKOV, B. Y.; FOMICHEV, A. S.; BARABANOV, A. L.; BARTH, W.; BEZBAKH, A. A.; BOGOMOLOV, S. L.; GOLOVKOV, M. S.; GORSHKOV, A. V.; DMITRIEV, S. N.; EREMIN, V. K.; ERSHOV, S. N.; ZHUKOV, M. V.; KALAGIN, I. V.; KARPOV, A. V.; KATAYAMA, T.; KISELEV, O. A.; KORSHENINNIKOV, A. A.; KRUPKO, S. A.; KULEVOY, T. V.; LITVINOV, Y. A.; LYCHAGIN, E. V.; MAKSIMKIN, I. P.; MESHKOV, I. N.; MUKHA, I. G.; NIKOLSKII, E. Y.; PARFENOVA, Y. L.; PARKHOMCHUK, V. V.; POLOZOV, S. M.; PFUTZNER, M.; SIDORCHUK, S. I.; SIMON, H.; SLEPNEV, R. S.; TER-AKOPIAN, G. M.; TRUBNIKOV, G. V.; CHUDOBA, V.; SCHEIDENBERGER, C.; SHAROV, P. G.; SHATUNOV, P. Y.; SHATUNOV, Y. M.; SHVETSOV, V. N.; SHULGINA, N. B.; YUKHIMCHUK, A. A.; YARAMYSHEV, S.:Scientific program of DERICA-prospective accelerator and storage ring facility for radioactive ion beam research. Physics –Uspekhi, 62(7), pp. 675-690. DOI: 10.3367/UFNe.2018.07.038387. IF2018:3,09 (Q1).

HABRMAN, P.:Directional Geiger-Muller detector with improved response to gamma radiation. Journal of Instrumentation, 14:P09018. DOI: 10.1088/1748-0221/14/09/P09018. IF2018:1,366 (Q3).

HENSH, S.; ABDUJABBAROV, A.; SCHEE, J.; STUCHLÍK, Z.:Gravitational lensing around Kehagias-Sfetsos compact objects surrounded by plasma. European Physical Journal C, 79(6):533. DOI:10.1140/epjc/s10052-019-7034-7. IF2018:4,843 (Q1).

HENSH, S.; STUCHLÍK, Z.:Anisotropic Tolman VII solution by gravitationaldecoupling. European Physical Journal C, 79(10):834. DOI: 10.1140/epjc/s10052-019-7360-9. IF2018:4,843 (Q1).

KONOPLYA, R. A.:Shadow of a black hole surrounded by dark matter. Physics Letters B, 795, pp. 1–6. DOI: 10.1016/j.physletb.2019.05.043. IF2018:4,162 (Q2).

KONOPLYA, R. A.; POSADA, C.; STUCHLÍK, Z.; ZHIDENKO, A.:Stable Schwarzschild stars as black-hole mimickers. Physical Review D, 100(4):044027. DOI: 10.1103/PhysRevD.100.044027. IF2018:4,368 (Q1).

KONOPLYA, R. A.; STUCHLÍK, Z.; ZHIDENKO, A.:Echoes of compact objects: New physics near the surface and matter at a distance. Physical Review D, 99(2):024007. DOI: 10.1103/PhysRevD.99.024007. IF2018:4,368 (Q1, Highly Cited Paper).

KONOPLYA, R. A.; ZHIDENKO, A.:Analytical representation for metrics of scalarized Einstein-Maxwell black holes and their shadows. Physical Review D, 100(4):044015. DOI:10.1103/PhysRevD.100.044015. IF2018:4,368 (Q1).

KONOPLYA, R. A.; ZHIDENKO, A.; ZINHAILO, A. F.:Higher order WKB formula for quasinormal modes and grey-body factors: recipes for quick and accurate calculations. Classical and Quantum Gravity, 36(15):155002. DOI: 10.1088/1361-6382/ab2e25. IF2018: 3,487 (Q1).

KONOPLYA, R. A.; ZINHAILO, A. F.:Hawking radiation of non-Schwarzschild black holes in higher derivative gravity: A crucial role of grey-body factors. Physical Review D, 99(10):104060. DOI:10.1103/PhysRevD.99.104060. IF2018:4,368 (Q1).

Konoplya, R. A.; Zinhailo, A. F.; Stuchlík, Z.:Quasinormal modes, scattering, and Hawking radiation in the vicinity of an Einstein-dilaton-Gauss-Bonnet black hole. *Physical Review D*, 99(12):124042. DOI:10.1103/PhysRevD.99.124042. IF2018: 4,368 (Q1).

KOPTEVA, E.; BORMOTOVA, I.; CHURILOVA, M.; STUCHLÍK, Z.:Accelerated Expansion of the Universe in the Model with Non-UniformPressure. *Astrophysical Journal*, 887(1):98. DOI: 10.3847/1538-4357/ab4f7f. IF2018:5,58 (Q1).

KOSTYLEVA, D.; MUKHA, I.; ACOSTA, L.; CASAREJOS, E.; CHUDOBA, V.; CIEMNY, A. A.; DOMINIK, W.; DUENAS, J. A.; DUNIN, V.; ESPINO, J. M.; ESTRADE, A.; FARINON, F.; FOMICHEV, A.; GEISSEL, H.; GORSHKOV, A.; GRIGORENKO, L. V.; JANAS, Z.; KAMINSKI, G.; KISELEV, O.; KNOBEL, R.; KRUPKO, S.; KUICH, M.; LITVINOV, Y. A.; MARQUINEZ-DURAN, G.; MARTEL, I.; MAZZOCCHI, C.; NOCIFORO, C.; ORDUZ, A. K.; PFUTZNER, M.; PIETRI, S.; POMORSKI, M.; PROCHAZKA, A.; RYMZHANOVA, S.; SANCHEZ-BENITEZ, A. M.; SCHEIDENBERGER, C.; SIMON, H.; SITAR, B.; SLEPNEV, R.; STANOIU, M.; STRMEN, P.; SZARKA, I.; TAKECHI, M.; TANAKA, Y. K.; WEICK, H.; WINKLER, M.; WINFIELD, J. S.; XU, X.; ZHUKOV, M.V.:Towardsthe Limits of Existence of Nuclear Structure: Observation and First Spectroscopy of the Isotope K-31 by Measuring Its Three-Proton Decay. *Physical Review Letters*, 123(9):092502. DOI:10.1103/PhysRevLett.123.092502. IF2018:9,227 (Q1, 1st decil).

KOTRLOVÁ, A.; ŠRÁMKOVÁ, E.; TÖRÖK, G.; GOLUCHOVÁ, K.; HORÁK, J.; STRAUB, O.:Non-geodesic corrections to mass-spin estimates for Galactic microquasars implied by quasiperiodic oscillation models. *Astronomische Nachrichten*, 340(1-3), pp. 112-115, special issue. DOI:10.1002/asna.201913572. IF2018:1,289 (Q3).

LANČOVÁ, D; ABARCA, D.; KLUŽNIAK, W.; WIELGUS, M.; SĄDOWSKI, A.; NARAYAN, R.; SCHEE, J.; TÖRÖK, G.; ABRAMOWICZ, M.:Puffy Accretion Disks: Sub-Eddington, Optically Thick, and Stable. *Astrophysical Journal Letters*, 884:L37. DOI: 10.3847/2041-8213/ab48f5. IF2018:8,374 (Q1, 1st decil).

OVALLE, J.:Decoupling gravitational sources in general relativity: The extended case. *Physics Letters B*, 788, pp. 213-218. DOI: 10.1016/j.physletb.2018.11.029. IF2018:4,162 (Q2, Highly Cited Paper).

OVALLE, J.; POSADA, C.; STUCHLÍK, Z.:Anisotropic ultracompact Schwarzschild star by gravitational decoupling. *Classical and Quantum Gravity*, 36(20):205010. DOI: 10.1088/1361-6382/ab4461. IF2018:3,487 (Q1).

PÁNIS, R.; KOLOŠ, M.; STUCHLÍK, Z.:Determination of chaotic behaviour in time series generated by charged particle motion around magnetized Schwarzschild black holes. *European Physical Journal C*, 79(6):479. DOI: 10.1140/epjc/s10052-019-6961-7. IF2018:4,843 (Q1).

POSADA, C.; CHIRENTI,C.:On the radial stability of ultra-compact Schwarzschild stars beyond the Buchdahl limit. *Classical and Quantum Gravity*, 36(6):065004. DOI: 10.1088/1361-6382/ab0526. IF2018:3,487 (Q1).

PUGLIESE, D.; QUEVEDO, H.:Disclosing connections between black holes and naked singularities: horizon remnants, Killing throats and bottlenecks. *European Physical Journal C*, 79(3):209. DOI:10.1140/epjc/s10052-019-6725-4. IF2018:4,843 (Q1)

PUGLIESE, D.; STUCHLÍK, Z.:RADs energetics and constraints on emerging tori collisions around super-massive Kerr black holes. *European Physical Journal C*, 79(4):288. DOI: 10.1140/epjc/s10052-019-6786-4. IF2018:4,843 (Q1).

RAYIMBAEV, J.; TURIMOV, B.; AHMEDOV, B.:Braneworld effects in plasma magnetosphere of a slowly rotating magnetized neutron star. International Journal of Modern Physics D, 28(10):1950128. DOI:10.1142/S0218271819501281. IF2018:2,004 (Q3).

SCHEE, J.; STUCHLÍK, Z.:Effective Geometry of the Bardeen Spacetimes: Gravitational Lensing and Frequency Mapping of Keplerian Disks. Astrophysical Journal, 874(1):12. DOI: 10.3847/1538-4357/ab04f3. IF2018:5,58 (Q1).

SCHEE, J.; STUCHLÍK, Z.:Profiled spectral lines of Keplerian rings orbiting in the regular Bardeen black hole spacetimes. European Physical Journal C, 79(12):988. DOI: 10.1140/epjc/s10052-019-7420-1. IF2018:4,843 (Q1).

SKARKA, M.; KABATH, P.; PAUNZEN, E.; FEDURCO, M.; BUDAJ, J.; DUPKALA, D.; KRTICKA, J.; HATZES, A.; PRIBULLA, T.; PARIMUCHA, S.; MIKULASEK, Z.; GUENTHER, E.; SABOTTA, S.; BLAZEK, M.; DVORAKOVA, J.; HAMBALEK, L.; KLOCOVA, T.; KOLLAR, V.; KUNDRA, E.; SLECHTA, M.; Vanko, M.:HD 99458: First time ever Ap-type star as a S Scuti pulsator in a short period eclipsing binary? Monthly Notices of the Royal Astronomical Society, 487(3), pp. 4230-4237. DOI: 10.1093/mnras/stz1478. IF2018:5,231 (Q1).

STUCHLÍK, Z.; SCHEE, J.:Shadow of the regular Bardeen black holes and comparison of the motion of photons and neutrinos. European Physical Journal C, 79(1):44. DOI: 10.1140/epjc/s10052-019-6543-8. IF2018:4,843 (Q1).

STUCHLÍK, Z.; SCHEE, J.; OVCHINNIKOV, D.:Generic regular black holes related to nonlinear electrodynamics with Maxwellian weak-field limit: Shadows and images of Keplerian disks. Astrophysical Journal, 887(2):145. DOI: 10.3847/1538-4357/ab55d5. IF2018:5,58 (Q1).

TESSAROTTO, M.; CREMASCHINI, C.:Role of Quantum Entropy and Establishment of H-Theorems in the Presence of Graviton Sinks for Manifestly-Covariant Quantum Gravity. Entropy, 21(4):418. DOI:10.3390/e21040418. IF2018:2,419 (Q2).

TÖRÖK, G.; GOLUCHOVÁ, K.; ŠRÁMKOVÁ, E.; URBANEC, M.; STRAUB, O.:Time-scale of twin-peak quasi-periodic oscillations and mass of accreting neutron stars. Monthly Notices of the Royal Astronomical society, 488(3), pp. 3896-3903. DOI: 10.1093/mnras/stz1929. IF2018:5,231(Q1).

TOSHMATOV, B.; STUCHLÍK, Z.; AHMEDOV, B.; MALAFARINA, D.:Relaxations of perturbations of spacetimes in general relativity coupled to nonlinear electrodynamics. Physical Review D, 99(6):064043. DOI:10.1103/PhysRevD.99.064043. IF2018:4,368 (Q1).

TURIMOV, B.; TOSHMATOV, B.; AHMEDOV, B.; STUCHLÍK, Z.:Quasinormal modes of magnetized black hole. Physical Review D, 100(8):084038. DOI: 10.1103/PhysRevD.100.084038. IF2018:4,368 (Q1).

TURSUNOV, A.; DADHICH, N.:Fifty Years of Energy Extraction from Rotating Black Hole: Revisiting Magnetic Penrose Process. Universe, 5(5):125. DOI: 10.3390/universe5050125. IF2018:2,165 (Q2).

URBANCOVA, G.; URBANEC, M.; TÖRÖK, G.; STUCHLÍK, Z.; BLASCHKE, M.; MILLER, J. C.:Epicyclic Oscillations in the Hartle-Thorne ExternalGeometry. Astrophysical Journal, 877(2):66. DOI: 10.3847/1538-4357/ab1b4c. IF2018:5,58 (Q1).

VOLKEL, S. H.; KONOPLYA, R.; KOKKOTAS, K. D.:Inverse problem for Hawking radiation. Physical ReviewD, 99(10):104025. DOI: 10.1103/PhysRevD.99.104025. IF2018:4,368 (Q1).

VRBA, J.; ABDUJABBAROV, A.; TURSUNOV, A.; AHMEDOV, B.; STUCHLÍK, Z.:Particle motion around generic black holes coupled to non-linear electrodynamics. European Physical Journal C, 79(9):778. DOI:10.1140/epjc/s10052-019-7286-2. IF2018:4,843 (Q1).

WATTS, A. L.; YU, W. F.; POUTANEN, J.; ZHANG, S.; BHATTACHARYYA, S.; BOGDANOV, S.; JI, L.; PATRUNO, A.; RILEY, T. E.; BAKALA, P.; BAYKAL, A.; BERNARDINI, F.; BOMBACI, I.; BROWN, E.; CAVECCHI, Y.; CHAKRABARTY, D.; CHENEVEZ, J.; DEGENAAR, N.; DEL SANTO, M.; DI SALVO, T.; DOROSHENKO, V.; FALANGA, M.; FERDMAN, R. D.; FEROCI, M.; GAMBINO, A. F.; GE, M. Y.; GREIF, S. K.; GUILLOT, S.; GUNGOR, C.; HARTMANN, D. H.; HEBELER, K.; HEGER, A.; HOMAN, J.; IARIA, R.; IN 'T ZAND, J.; KARGALTSEV, O.; KURKELA, A.; LAI, X. Y.; LI, A.; LI, X. D.; LI, Z. S.; LINARES, M.; LU, F. J.; MAHMOODIFAR, S.; MENDEZ, M.; MILLER, M. C.; MORSINK, S.; NATTILA, J.; POSSENTI, A.; PRESCOD-WEINSTEIN, C.; QU, J. L.; RIGGIO, A.; SALMI, T.; SANNA, A.; SANTANGELO, A.; SCHATZ, H.; SCHWENK, A.; SONG,L. M.; ŠRÁMKOVÁ, E.; STAPPERS, B.; STIELE, H.; STROHMAYER, T.; TEWS, I.; TOLOS, L.; TÖRÖK, G.; TSANG, D.; URBANEC, M.; VACCHI, A.; XU, R. X.; XU, Y. P.; ZANE, S.; ZHANG, G. B.; ZHANG, S. N.; ZHANG, W. D.; ZHENG, S. J.; ZHOU, X.:Dense matter with eXTP. Science China–Physics Mechanics & Astronomy, 62(2):029503, special issue. DOI: 10.1007/s11433-017-9188-4. IF2018:3,986 (Q1, Highly Cited Paper).

WOLF, M.; ZASCHE, P.; KUCAKOVA, H.; MASEK, M.; HONKOVA, K.; JURYSEK, J.; PASCHKE, A.; SMELCER, L.; ZEJDA, M.:Triple Eccentric Systems V0345 Lac, YY Sgr, and DR Vul. Acta Astronomica, 69(1), pp. 63–78. DOI:10.32023/0001-5237/69.1.5. IF2018:2,64 (Q2).

ZAPLETAL, M., MIKUŠKA,P.:Ammonia emissions and dry deposition in the vicinity of the dairy farms. Atmósfera, 32(4), p.337–350. DOI: 10.20937/ATM.2019.32.04.06. IF: 1,438 (Q4).

ZINHAUTO, A. F.:Quasinormal modes of Dirac field in the Einstein-Dilaton-Gauss-Bonnet and Einstein-Weyl gravities. European Physical Journal C, 79(11):912. DOI: 10.1140/epjc/s10052-019-7425-9 IF2018:4,843 (Q1).

### Články v recenzovaných sbornících

AHMEDOV, B.; TURIMOV, B.; STUCHLÍK, Z.; TURSUNOV, A.:Optical properties of magnetized black hole in plasma. International Journal of Modern Physics: Conference Series, 49:1960018. DOI:10.1142/S2010194519600188.

BENEŠ, P.; BLASCHKE, F.:Cho–Maisond magnetic monopole: BPS limit and lower mass bound. Journal of Physics: Conference Series, 1416(1):012004, conference: C19-07-08.6, pp. 6, DOI: 10.1088/1742-6596/1416/1/012004.

ECKART, A.; TURSUNOV, A.; ZAJACEK, M.; PARSA, M.; HOSSEINI, E.; SUBROWEIT, M.; PEISSKER, F.; STRAUBMEIER, C.; HORROBIN, M.; KARAS, V.:Mass, Distance, Spin, Charge, and Orientation of the super massive black hole SgrA. Proceedings of Science, 342:048. Dostupné z:<https://pos.sissa.it/342/048/>.

ECKART, A.; ZAJACEK, M.; VALENCIA-S.,M.; PARSA, M.; HOSSEINI, E.; STRAUBMEIER, C.; SUBROWEIT, M.; TURSUNOV, A.:The central light-year of the Milky Way: How stars and gas live in a relativistic environment of a super-massive black hole. Journal of Physics: Conference Series, 1258(2019):012019. DOI:10.1088/1742-6596/1258/1/012019.

STUCHLÍK, Z.; KOLOŠ, M.; TURSUNOV, A.:Magnetized Black Holes: Ionized Keplerian Disks and Acceleration of Ultra-High Energy Particles. Proceedings 2019, 17(1):13 (2019). DOI:10.3390/proceedings2019017013.

ZAJAČEK, M.; TURSUNOV, A.; ECKART, A.; BRITZEN, S.; HACKMANN, E.; KARAS, V.; STUCHLÍK, Z.; CZERNÝ, B.; ZENSUS,A.:Constraining the charge of the Galactic centre black hole. Journal of Physics: Conference Series, 1258(1):012031. DOI: 10.1088/1742-6596/1258/1/012031.