Opis raziskovalnega dela *(Research work description*)

1. Članica UL (*UL member)*:

Fakulteta za matematiko in fiziko

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Prof. dr. Denis Arčon, denis.arcon@fmf.uni-lj.si

3. Raziskovalno področje (*Research field*):

Fizika kondenzirane snovi

4. Opis raziskovalnega dela *(Research work description*):
Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce *(It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.)*.

Slov.: Doktorski projekt je usmerjen v eksperimentalno raziskovanje močno koreliranih elektronskih sistemov s poudarkom na antiferomagnetnih Mottovih izolatorjih in nekonvencionalnih superprevodnikih. Ti materiali izkazujejo emergentne kvantne faze, ki izhajajo iz močnih elektronskih korelacij, pri čemer preplet magnetizma in superprevodnosti ostaja eno osrednjih odprtih vprašanj sodobne fizike kondenzirane snovi.

Cilj projekta je razjasniti mikroskopske mehanizme, ki določajo magnetni red, spinsko dinamiko ter njihovo povezavo s superprevodnostjo. Poseben poudarek bo na raziskavi razvoja spinskih fluktuacij v bližini faznih prehodov in na razumevanju njihove vloge pri nastanku nekonvencionalnih superprevodnih stanj.

Doktorski študent bo uporabljal komplementarne lokalne eksperimentalne metode, vključno z jedrsko magnetno resonanco (NMR), elektronsko paramagnetno resonanco (EPR) in mionsko spinsko relaksacijo (μSR). Te tehnike omogočajo vpogled v:

- *lokalna magnetna polja in porazdelitve notranjih polj,*
- *statične in dinamične spinske korelacije,*
- *nizkoenergijske spinske ekscitacije in kritične fluktuacije,*
- *simetrijo in naravo magnetnih ter superprevodnih rednih parametrov.*

Raziskovalno delo bo obsegalo eksperimente pri nizkih temperaturah in v visokih magnetnih poljih, analizo relaksacijskih in resonančnih spektrov ter primerjavo rezultatov s sodobnimi teoretičnimi modeli močno koreliranih elektronskih sistemov. Od kandidata se pričakuje aktivno sodelovanje pri interpretaciji eksperimentalnih rezultatov v okviru sodobnih teoretičnih pristopov h kvantnemu magnetizmu in nekonvencionalni superprevodnosti.

Projekt bo prispeval k boljšemu razumevanju kolektivno pogojenih kvantnih faz v kompleksnih materialih ter k širšemu iskanju univerzalnih mehanizmov, ki določajo pojav visokotemperaturne in nekonvencionalne superprevodnosti.

Eng.: This PhD project focuses on the experimental investigation of strongly correlated electron systems, with particular emphasis on antiferromagnetic Mott insulators and unconventional superconductors. These materials exhibit emergent quantum phases driven by strong electronic correlations, where the interplay between magnetism and superconductivity remains one of the central open questions in condensed matter physics.

The project aims to elucidate the microscopic mechanisms governing magnetic order, spin dynamics, and their relationship to superconductivity. A key objective is to identify how spin fluctuations evolve across phase transitions and how they contribute to the emergence of unconventional superconducting states.

The doctoral candidate will employ complementary local-probe techniques, including nuclear magnetic resonance (NMR), electron paramagnetic resonance (EPR), and muon spin relaxation (μSR). These methods provide access to:

- *local magnetic fields and internal field distributions,*
- *static and dynamic spin correlations,*
- *low-energy spin excitations and critical fluctuations,*
- *symmetry and nature of magnetic and superconducting order parameters.*

The research will involve low-temperature and high-magnetic-field experiments, data analysis of relaxation and resonance spectra, and comparison with theoretical models of correlated electron systems. The candidate is expected to contribute to the interpretation of experimental results within modern theoretical frameworks of quantum magnetism and unconventional superconductivity.

The project will advance the understanding of emergent quantum phases in complex materials and contribute to the broader effort of identifying universal mechanisms underlying high-temperature and unconventional superconductivity.

5. Priloge, ki jih je treba priložiti ob prijavi *(Documents required to be submitted with the application)*:

☐ **potrdilo o doseženi izobrazbi *(proof of completed education)***

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja)
  (candidate who has completed a Master's degree (2nd Bologna level)):
  - diplomska listina / potrdilo o zaključku študijskega programa
    (diploma certificate / certificate of completion of the study programme)
  - priloga k diplomi / potrdilo o opravljenih obveznostih
    (diploma supplement / official transcript of records containing all grades obtained in the study programme)
- kandidat, ki še ni zaključil študija na 2. stopnji
  (candidate who has not yet completed a Master's degree):
  - potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij
    (official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.)

☐ **nagrade –** univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada *(awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award))*

☐ **bibliografija** *(bibliography)*

☐ **življenjepis** *(CV)*

☐ **motivacijsko pismo** *(motivation letter)*

☐ **opis dosedanjega sodelovanja pri raziskovalnem delu** *(description of the candidate's research work)*

☐ **osnutek idejne zasnove raziskovalnega dela** *(preliminary research proposal)*

☐ **priporočilno pismo** *(letter of recommendation)*

☐ **druge priloge** *(other attachments):*

Opis raziskovalnega dela *(Research work description*)

1. Članica UL (*UL member)*:

Fakulteta za matematiko in fiziko

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Janez Kos, janez.kos@fmf.uni-lj.si

3. Raziskovalno področje (*Research field*):

Astrofizika

4. Opis raziskovalnega dela *(Research work description*):
Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce *(It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.)*.

Slov.: Predmet raziskovalnega dela mladega raziskovalca ali raziskovalke (MR) bosta kinematika razsutih kopic v Naši Galaksiji in interakcija razsutih kopic z gravitacijskim potencialom Galaksije in njenih komponent. Razsute kopice so goste skupine mladih zvezd, ki so se v kopici rodile in po nekaj obhodih okoli Galaksije razpadejo. Zvezde, ki so v kopico blago gravitacijsko vezane, iz nje izhlapevajo, kopico pa razbijajo tudi plimske sile Galaksije in perturbacije drugih masivnih komponent Galaksije kot so molekularni oblaki in spiralni rokavi. Sčasoma se zvezde, ki so zapustile kopico, razporedijo v dolge plimske repe vzdolž orbite kopice. S pomočjo podatkov iz najmodernejših pregledov zvezd v Galaksiji, predvsem z misije Gaia, lahko zvezde v plimskih repih najdemo tudi daleč od jedra oz. matične kopice. Iz oblike plimskih repov in struktur v njih lahko sklepamo na obliko gravitacijskega potenciala Galaksije, predvsem na karakteristiko prečke. Oblike repov nam razkrijejo tudi morebitne interakcije kopic s spiralnimi rokavi, molekularnimi oblaki in drugimi kopicami. Glavni izziv je najti zvezde v plimskih repih, saj so pomešane z množico starejših zvezd v disku Galaksije. MR bo pri tem uporabljal/a podatke satelita Gaia, predvsem najnovejšo izdajo podatkov, ki jo pričakujemo konec leta 2026 ali v prvih mesecih leta 2027. Podatke bo dopolnil/a z opazovanji spektroskopskih pregledov neba, na primer GALAH, LAMOST in 4MOST. Slednji je z opazovanji začel letos in bo tekom raziskave dostavljal pomebne podatke o hitrostih zvezd in o njihovi kemični sestavi. Oboje nam bo pomagalo najti zvezde v plimskih repih razsutih kopic. Cilj projekta je zanesljivo idetificirati zvezde v plimskih repih nekaterih bližnjih kopic in iz njihove oblike določiti parametre gravitacijskega potenciala Galaksije. MR bo pri tem razvijal/a in preizkušal/a nove statistične pristope k analizi masivnih zbirk podatkov iz različnih pregledov neba, združeval/a bo različne nabore podatkov in določal/a selekcijske funkcije, ki vplivajo na iskanje zvezd v plimskih repih. S preprostimi dinamičnimi modeli bo modeliral/a kinematični razvoj kopic v gravitacijskem polju Galaksije. Pričakuje se, da ima MR veselje do dela s podatki, je spreten programer/ka in ima predhodno splošno znanje astrofizike, statistike in klasične mehanike ter pozna strukturo in fiziko Naše Galaksije.

Eng.: The topic of research will be the kinematics of open clusters in the Milky Way and the interaction of clusters with the gravitational potential of the Milky Way and its components. Open clusters are dense groups of young stars that were born together. These groups dissolve and break apart after a few revolutions around the Milky Way. Weakly bound stars evaporate from the cluster, which is also perturbed by the tidal forces of the Milky Way and by interactions with giant molecular clouds and spiral arms. Stars ejected from the cluster form elongated structures along the clusters' orbits called tidal tails. In data from modern all-sky surveys of stars, such as the Gaia mission, we can identify stars in the tidal tails at large distances from the cluster cores. From the shape of the tidal tails and structure within them, we can infer the gravitational potential of the Milky Way, particularly the shape and characteristics of the bar. The shape of the tidal tails can also reveal past interactions with giant molecular clouds, spiral arms and collisions with other clusters. The main challenge will be finding stars in the tidal tales, as they are mixed wth a much larger population of older stars in the Milky Way disk. The Junior researcher (MR) will use data from the Gaia mission, particularly the latest data release, expected at the end of 2026 or in the first months of 2027. They will combine the data with observations of spectroscopic

surveys, such as GALAH, LAMOST and 4MOST. The latter was commenced this year and will deliver valuable data on velocities and chemical composition of stars throughout the duration of the project. The goal of the project is to accurately identify stars in the tidal tails of some nearby open clusters and to derive the parameters and shape of the Milky Way's gravitational potential. MR will develop, use, and test new statistical methods for analysing large datasets from several surveys of stars; they will combine datasets and compute the selection functions needed to find stars in tidal tails. They will model the kinematic evolution of clusters using basic tools from the field of Galactic dynamics. MR is expected to enjoy working with data, is a skilled programmer, has prior general knowledge of astrophysics, statistics, classical mechanics, and is familiar with the structure and physics of the Milky Way.

5. Priloge, ki jih je treba priložiti ob prijavi *(Documents required to be submitted with the application)*:

✔ **potrdilo o doseženi izobrazbi *(proof of completed education)***

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja)
  (candidate who has completed a Master's degree (2nd Bologna level)):
  - *o* diplomska listina / potrdilo o zaključku študijskega programa
    (diploma certificate / certificate of completion of the study programme)
  - **o** priloga k diplomi / potrdilo o opravljenih obveznostih
    (diploma supplement / official transcript of records containing all grades obtained in the study programme)
- kandidat, ki še ni zaključil študija na 2. stopnji
  (candidate who has not yet completed a Master's degree):
  - *o* potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij
    (official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.)

✔ **nagrade –** univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada *(awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award))*

☐ **bibliografija** *(bibliography)*

✔ **življenjepis** *(CV)*

✔ **motivacijsko pismo** *(motivation letter)*

✔ **opis dosedanjega sodelovanja pri raziskovalnem delu** *(description of the candidate's research work)*

☐ **osnutek idejne zasnove raziskovalnega dela** *(preliminary research proposal)*

☐ **priporočilno pismo** *(letter of recommendation)*

✔ **druge priloge** *(other attachments):*

- Kontaktne informacije dveh oseb, ki ju lahko kontaktiramo za reference in priporočila.
- Življenjepis naj vsebuje tudi bibliografijo.

- Contact informations of two persons who can provide references and recommendations.
- CV should include bibliography.

Opis raziskovalnega dela *(Research work description*)

1. Članica UL (*UL member)*:

Fakulteta za matematiko in fiziko

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Natan Osterman, natan.osterman@fmf.uni-lj.si

3. Raziskovalno področje (*Research field*):

Eksperimentalna fizika mehke snovi

4. Opis raziskovalnega dela (Research work description*)*:
Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce *(It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.)*.

Slov.: Interakcije in nastanek struktur v kompleksni mehki snovi

Eng.: Interactions and Structure Formation in Complex Soft Matter Systems

5. Priloge, ki jih kandidat priloži k prijavi *(Documents that the candidate submits with the application)*:

☐ **diplomska listina/potrdilo o zaključku študijskega programa** *(diploma certificate for study programme, with which the candidate has enrolled/ will enroll in a doctoral degree programme)*

☐ **priloga k diplomi/ potrdilo o opravljenih obveznostih (***official transcript of all the grades for study programme, with which the candidate has enrolled/will enroll in a doctoral degree programme)*

☐ **potrdilo o do sedaj opravljenih obveznostih z ocenami študijskega programa, s katerim se bo kandidat prijavil na študij** *(official transcript of all the grades the candidate has received so far for the study programme, with which the candidate will enroll to a doctoral degree programme)*

☐ **nagrade** *(awards (e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award))*

☐ **bibliografija** *(bibliography)*

☐ **življenjepis** *(CV)*

☐ **motivacijsko pismo** *(motivation letter)*

☐ **opis dosedanjega sodelovanja pri raziskovalnem delu** *(description of the candidate's research work)*

☐ **osnutek idejne zasnove raziskovalnega dela** *(preliminary research proposal)*

☐ **priporočilno pismo** *(letter of recommendation)*

☐ **druge priloge** *(other attachments)*

Opis raziskovalnega dela *(Research work description*)

1. Članica UL (*UL member)*:

FMF

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Andrej Studen, andrej.studen@fmf.uni-lj.si

3. Raziskovalno področje (*Research field*):

medicinska fizika, LS7

4. Opis raziskovalnega dela *(Research work description*):
Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce *(It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.)*.

Slov.:

Personalizirano presejanje je strategija, ki prilagaja presejalne posege posameznikom. Pri tem kot del raziskovanja učinkovitega izvajanja tovrstne strategije:

- razvijamo metode za zanesljivo kvantifikacijo ogroženosti za raka z uporabo umetne inteligence in slikovnih metod, kot sta mamografija ali magnetna resonanca
- ocenjujemo težavnost personaliziranega presejanja za posameznika, ter breme za družbo in zdravstveni sistem
- iščemo optimalne presejalne poti prikrojene za vsakega udeleženca
- integriramo razvite kvantitativne metode v racionalne odločitve ob presejanju.

Kandidat bo vključen v močno interdisciplinarno ekipo specialistov za medicinsko fiziko, javno zdravje, genetiko, radiologijo ter radiološko tehnologijo, vpeto v akademsko in klinično okolje. Ekipa sodeluje oz. je del slovenskih presejalnih programov (zlasti presejanje raka dojk) in oz. deluje pri študiji obravnave posameznic z visokim tveganjem za raka dojk. Pričakujemo kandidata podkovanega v fiziki, s poznavanjem problematike detekcije in z detekcijo povezanih negotovosti, s poznavanjem orodj za kvantitativno analizo slike (python, orodja umetne inteligence) ter da bo imel veselje pri uporabi fizike pri perečih problemih v medicini.

*Eng.:*Personalized screening is a strategy that tailors screening interventions to individuals. For efficient implementation, we are

- developing methods to reliably quantify cancer risk, using AI and imaging modalities such as mammography or MRI
- estimating burden of screening on individual, society and health system
- developing methods that optimize the trade-off for each participant
- integrate methods in screening decisions.

The candidate will be included in a strong interdisciplinary team of medical physicists, public health specialists, geneticists, radiologists and radiographers, combining academia and clinical environment. We are part of ongoing studies with the major Slovenian screening programs (breast cancer screening in particular) and in management of high breast cancer risk individuals. We expect the candidate to be versed in physics, including concepts of particle detection and associated uncertainties, have a background in software analysis tools such

as python and AI tools, and have a preference for applying basic physics to real world medical problems.

5. Priloge, ki jih je treba priložiti ob prijavi *(Documents required to be submitted with the application)*:

☒ **potrdilo o doseženi izobrazbi *(proof of completed education)***

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja)
  (candidate who has completed a Master's degree (2nd Bologna level)):
  - diplomska listina / potrdilo o zaključku študijskega programa
    (diploma certificate / certificate of completion of the study programme)
  - priloga k diplomi / potrdilo o opravljenih obveznostih
    (diploma supplement / official transcript of records containing all grades obtained in the study programme)
- kandidat, ki še ni zaključil študija na 2. stopnji
  (candidate who has not yet completed a Master's degree):
  - potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij
    (official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.)

☐ **nagrade –** univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada *(awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award))*

☐ **bibliografija** *(bibliography)*

☒ **življenjepis** *(CV)*

☐ **motivacijsko pismo** *(motivation letter)*

☒ **opis dosedanjega sodelovanja pri raziskovalnem delu** *(description of the candidate's research work)*

☐ **osnutek idejne zasnove raziskovalnega dela** *(preliminary research proposal)*

☐ **priporočilno pismo** *(letter of recommendation)*

☒ **druge priloge** *(other attachments):* V dokumentu navedite odgovore na vprašanja / P*lease provide a document that answers the following questions*:
1. Kateri vidik (medicinske) fizike se vam zdi najbolj navdušujoč in zakaj ? / *What aspect of the science of medical physics is most exciting to me and why?*
2. Kako se bo ta tematika razvijala v naslednjih 10 letih ? / *How do you see the development of these topics in the next 10 years?*
3. Kako bi opisali poglavitno motivacijo za doktorat? Kje se vidite v 10 letih ? / *What is your primary motivation for doing a PhD? What do you see yourself doing 10 years from now?*

Opis raziskovalnega dela *(Research work description*)

1. Članica UL (*UL member)*:

Fakulteta za matematiko in fiziko (FMF)

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Marko Toroš (marko.toros@fmf.uni-lj.si)

3. Raziskovalno področje (*Research field*):

Teorija odprtih kvantnih sistemov z aplikacijami (Theory of open quantum systems with applications)

4. Opis raziskovalnega dela *(Research work description*):
Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce *(It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.)*.

Slov.: Raziskave bodo osredotočene na teoretični opis odprtih kvantnih sistemov in teorijo kvantnega merjenja za razvoj kvantnih senzorjev nove generacije. Posebna pozornost bo namenjena zaznavanju izjemno šibkih signalov, kjer imajo ključno vlogo kvantno omejene meritve, analiza razmerja med signalom in šumom ter stohastični modeli. Kot reprezentativno aplikacijo bomo raziskali kvantno zaznavanje šibkih gravitacijskih interakcij z uporabo levitiranih optomehanskih sistemov. Zaželeno je poznavanje konceptov in metod, kot so kontinuirano kvantno merjenje, kvantne trajektorije in kvantno upravljanje s povratno zanko.

Eng.: The research will focus on the theoretical description of open quantum systems and quantum measurement theory, aimed at developing next-generation quantum sensors. Particular attention will be devoted to the detection of extremely weak signals, where quantum-limited measurement processes, signal-to-noise ratio analysis, and stochastic evolution models are crucial. As a representative application, we will explore quantum sensing of weak gravitational interactions using levitated optomechanical systems. Familiarity with concepts and methods, such as continuous measurement, quantum trajectories, and quantum feedback control, is desirable.

5. Priloge, ki jih je treba priložiti ob prijavi *(Documents required to be submitted with the application)*:

☒ **potrdilo o doseženi izobrazbi *(proof of completed education)***

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja)
  (candidate who has completed a Master's degree (2nd Bologna level)):
  - *o* diplomska listina / potrdilo o zaključku študijskega programa
    (diploma certificate / certificate of completion of the study programme)
  - **o** priloga k diplomi / potrdilo o opravljenih obveznostih
    (diploma supplement / official transcript of records containing all grades obtained in the study programme)
- kandidat, ki še ni zaključil študija na 2. stopnji
  (candidate who has not yet completed a Master's degree):
  - *o* potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij
    (official transcript of records listing all courses and grades obtained so far in the Master's

degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.)

☐ **nagrade –** univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada *(awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award))*

☐ **bibliografija** *(bibliography)*

☒ **življenjepis** *(CV)*

☐ **motivacijsko pismo** *(motivation letter)*

☐ **opis dosedanjega sodelovanja pri raziskovalnem delu** *(description of the candidate's research work)*

☐ **osnutek idejne zasnove raziskovalnega dela** *(preliminary research proposal)*

☐ **priporočilno pismo** *(letter of recommendation)*

☐ **druge priloge** *(other attachments):*

Opis raziskovalnega dela *(Research work description*)

1. Članica UL (*UL member)*:

Fakulteta za matematiko in fiziko (Faculty of Mathematics and Physics)

2. Ime, priimek in elektronski naslov mentorja/ice (*Mentor's name, surname and email*):

Matija Vidmar, matija.vidmar@fmf.uni-lj.si

3. Raziskovalno področje (*Research field*):

Verjetnost (Probability)

4. Opis raziskovalnega dela *(Research work description*):
Vključuje morebitne dodatne pogoje, ki jih mora izpolnjevati kandidat/ka za mladega raziskovalca/ko, ki niso navedeni v razpisu za mlade raziskovalce *(It includes any additional conditions that the candidate for a young researcher must meet, which are not listed in the call to tender for young researchers.)*.

Slov.: Tema(e) iz področja (posplošenih) stohastičnih procesov po dogovoru. Možnosti vključujejo teorijo Lévyjevih in povezanih procesov ali stohastičnih šumov Tsirelsona.

Eng.: Topic(s) in the theory of (generalized) stochastic processes subject to agreement. Possibly in the theory of Lévy and allied processes or Tsirelson's stochastic noises.

5. Priloge, ki jih je treba priložiti ob prijavi *(Documents required to be submitted with the application)*:

☒ **potrdilo o doseženi izobrazbi *(proof of completed education)***

- kandidat z zaključenim magistrskim študijskim programom (2. bolonjska stopnja)
  (candidate who has completed a Master's degree (2nd Bologna level)):
  - diplomska listina / potrdilo o zaključku študijskega programa
    (diploma certificate / certificate of completion of the study programme)
  - priloga k diplomi / potrdilo o opravljenih obveznostih
    (diploma supplement / official transcript of records containing all grades obtained in the study programme)
- kandidat, ki še ni zaključil študija na 2. stopnji
  (candidate who has not yet completed a Master's degree):
  - potrdilo o do sedaj opravljenih obveznostih z ocenami magistrskega študijskega programa, s katerim se bo kandidat prijavil na doktorski študij
    (official transcript of records listing all courses and grades obtained so far in the Master's degree programme on the basis of which the candidate will apply for enrollment in a doctoral degree programme.)

☐ **nagrade –** univerzitetna Prešernova nagrada ali Prešernova nagrada članice Univerze v Ljubljani oz. druga enakovredna nagrada *(awards, e.g. Prešeren Prize of the University of Ljubljana, Prešeren Prize of a University of Ljubljana member and/or another equivalent award))*

☒ **bibliografija** *(bibliography)*

☒ **življenjepis** *(CV)*

☒ **motivacijsko pismo** *(motivation letter)*

☐ **opis dosedanjega sodelovanja pri raziskovalnem delu** *(description of the candidate's research work)*

☐ **osnutek idejne zasnove raziskovalnega dela** *(preliminary research proposal)*

☒ **priporočilno pismo** *(letter of recommendation)*

☒ **druge priloge** *(other attachments):* certifikat znanja angleškega jezika, če angleščina ni materni jezik kandidata/ke (*English language certificate if English is not the mother tongue of the candidate*)