

**Табела. 9.6.** Компетентност наставника

<b>Име и презиме</b>		Часлав Брукнер				
<b>Звање</b>		Редовни професор				
<b>Ужа научна област</b>		Заснивање квантне механике и теорија квантне информације				
<b>Академска каријера</b>	Година	Институција	Област	Ужа научна односно уметничка област		
Избор у звање	2014	Универзитет Беч	Физика	Квантне механика и квантна информатика		
Докторат	1999	Универзитет Беч	Физика	Квантна информатика		
Магистратура						
Диплома	1995	Универзитет Беч	Физика	Квантне механика		
<b>Списак предмета које наставник држи на докторским студијама</b>						
<b>Р.Б.</b>	<b>Ознака</b>	<b>Назив предмета</b>				
1	ФИЗДФКН4	Kvantna informacija i zasnivanje kvantne mehanike				
<b>Најзначајнији радови у складу са захтевима допунских услова стандарда за дато поље (бар 10 не више од 20)</b>						
1	M. Zych, F. Costa, I. Pikovski and Č. Brukner, Bell's theorem for temporal order, Nature Communications <b>10</b> , 3772 (2019).		Chosen among 25 most read Nature Communications articles in physics 2019.			
2	F. Giacomini, E. Castro, and Č. Brukner, Quantum mechanics and the covariance of physical laws in quantum reference frames, Nature Communications <b>10</b> , 494 (2019).					
3	M. Zych and Č. Brukner, Quantum formulation of the Einstein equivalence principle, Nature Physics <b>14</b> , 1027-1031 (2018).					
4	I. Pikovski, M. Zych, F. Costa, Č. Brukner, Universal decoherence due to gravitational time dilation, Nature Physics <b>11</b> , 668–672 (2015)		News & Views by Angelo Bassi “Gravity: Wanna be quantum” in Nature Physics 11, 626-627, (2015).			
5	O. Oreshkov, F. Costa and Č. Brukner, Quantum correlations with no causal order, Nature Communications <b>3</b> , 1092 (2012).		News & Views in Nature Physics <b>8</b> , 860–861, (2012).			
6	I. Pikovski, M. R. Vanner, M. Aspelmeyer, M. S. Kim and Č. Brukner, Probing Planck-scale physics with quantum optics, Nature Physics <b>8</b> , 393–397 (2012).		Highlighted by Physics Today, Physics Update, May 2012, and by IOP in physicsworld.com.			
7	M. Zych, F. Costa, I. Pikovski, and Č. Brukner, Quantum interferometric visibility as a witness of general relativistic proper time, Nature Communication <b>2</b> , 505 (2011)..		2 <sup>nd</sup> of the most frequently downloaded papers published in Nature Comm. in Nov. 2011; Press Release by Nature Comm.; Highlighted by Nature Asia			
8	J. Kofler and Č. Brukner, Classical World Arising out of Quantum Physics under the Restriction of Coarse-Grained Measurements, Phys. Rev. Lett. <b>99</b> , 180403 (2007).		Nature News, 2007			
9	Č. Brukner, M. Zukowski, J.-W. Pan and A. Zeilinger, Bell's Inequalities and Quantum Communication Complexity, Phys. Rev. Lett. <b>92</b> , 127901 (2004).					
10	M. Zukowski and Č. Brukner, Bell's Theorem for General N-Qubit States, Phys. Rev. Lett. <b>88</b> (2002) 210401.					
<b>Збирни подаци научне активност наставника</b>						
Укупан број цитата, без аутоцитата		Око 6500 (Scopus, мај 2021)				
Укупан број радова са SCI (или SSCI) листе						
Тренутно учешће на пројектима		Домаћи	Међународни:	5		
Усавршавања						
Други подаци које сматрате релевантним: Sa svojim kolegama (medju njima i Robert M. Wald sa Enrico Fermi Instituta) Brukner dobija 2019 god. prvu nagradu Gravity Research Foundation-a za најбоље написани есеј о гравитацији. Године 2015 добија награду „Marko Jarić“ „за допринос концептуалном и теоријском заснивачу квантне мејанике, односно за рад на квантној нелокалности и проблему каузалности у квантној мејанике, као и примену квантних корелација у квантној информатици.“						
Максимална дужина не сме бити већа од 1 странице А4						

**Table. 9.6** Teachers' competences

<b>Name and family name</b>		Caslav Brukner					
<b>Title</b>		Professor					
<b>Narrow scientific area</b>		Quantum foundations and quantum information theory					
<b>Academic career</b>	Year	Institution	Area	Narrow scientific or art area			
Election to the title	2014	University of Vienna	Physics	Quantum mechanics and quantum information			
PhD	1999	University of Vienna	Physics	Quantum information			
Diploma	1995	University of Vienna	Physics	Quantum mechanics			
<b>List of subjects the teacher is lecturing in doctoral studies</b>							
No.	Mark	Subject name					
1		Quantum information and the foundations of quantum mechanics					
The most significant papers, in compliance with the requirements of the additional requirements of the standard for the given field ( <b>minimum 10, not more than 20</b> )							
1	M. Zych, F. Costa, I. Pikovski and Č. Brukner, Bell's theorem for temporal order, <i>Nature Communications</i> <b>10</b> , 3772 (2019).			Chosen among 25 most read <i>Nature Communications</i> articles in physics 2019.			
2	F. Giacomini, E. Castro, and Č. Brukner, Quantum mechanics and the covariance of physical laws in quantum reference frames, <i>Nature Communications</i> <b>10</b> , 494 (2019).						
3	M. Zych and Č. Brukner, Quantum formulation of the Einstein equivalence principle, <i>Nature Physics</i> <b>14</b> , 1027-1031 (2018).						
4	I. Pikovski, M. Zych, F. Costa, Č. Brukner, Universal decoherence due to gravitational time dilation, <i>Nature Physics</i> <b>11</b> , 668–672 (2015).			News & Views by Angelo Bassi “Gravity: Wanna be quantum” in <i>Nature Physics</i> 11, 626-627, (2015).			
5	O. Oreshkov, F. Costa and Č. Brukner, Quantum correlations with no causal order, <i>Nature Communications</i> <b>3</b> , 1092 (2012).			News & Views in <i>Nature Physics</i> <b>8</b> , 860–861, (2012).			
6	I. Pikovski, M. R. Vanner, M. Aspelmeyer, M. S. Kim and Č. Brukner, Probing Planck-scale physics with quantum optics, <i>Nature Physics</i> <b>8</b> , 393–397 (2012).			Highlighted by <i>Physics Today</i> , <i>Physics Update</i> , May 2012, and by IOP in <i>physicsworld.com</i> .			
7	M. Zych, F. Costa, I. Pikovski, and Č. Brukner, Quantum interferometric visibility as a witness of general relativistic proper time, <i>Nature Communication</i> <b>2</b> , 505 (2011)..			2 <sup>nd</sup> of the most frequently downloaded papers published in <i>Nature Comm.</i> in Nov. 2011; Highlighted by <i>Nature Asia</i>			
8	J. Kofler and Č. Brukner, Classical World Arising out of Quantum Physics under the Restriction of Coarse-Grained Measurements, <i>Phys. Rev. Lett.</i> <b>99</b> , 180403 (2007).			<i>Nature News</i> , 2007			
9	Č. Brukner, M. Zukowski, J.-W. Pan and A. Zeilinger, Bell's Inequalities and Quantum Communication Complexity, <i>Phys. Rev. Lett.</i> <b>92</b> , 127901 (2004).						
10	M. Zukowski and Č. Brukner, Bell's Theorem for General N-Qubit States, <i>Phys. Rev. Lett.</i> <b>88</b> (2002) 210401.						
<b>Cumulative data of scientific activity of the teacher</b>							
Total number of citations, without self citations		Around 6500 (Scopus, May 2021)					
Total number of papers on the SCI (or SSCI) list							
Current participation in projects		Domestic	International: 5				
specialization							
Other information you consider to be important: With his colleagues he won the First Award in the Gravity Research Foundation essay competition for 2019 (see <a href="https://www.gravityresearchfoundation.org/announcement">https://www.gravityresearchfoundation.org/announcement</a> ). In 2015 he was awarded Marko Jaric Award, recognized as highest professional award in the field of physical science granted to researchers of Serbian origin (“for contributions in the field of quantum foundations”)							
Maximum length may not be over 1 A4 page							