

EARTH SCIENCES		
Cycle	XXXI	
Duration	3 years	
Supervisor	Prof. Fulvio Celico – “Macedonio Melloni” Department of Physics and Earth Sciences E-mail: fulvio.celico@unipr.it	
Research Topics	<ul style="list-style-type: none"> • Paleofluid flow in fault zones by using diagenetic concretions. • Experimental analysis of marine intrusion processes in heterogeneous coastal aquifers, and implementation of simulation models. • Radiogenic isotope (Sr-Nd-Hf-Os) constraints on the evolution of mantle rocks from the Alpine ophiolites • Recharge and flow processes in evaporitic aquifer systems. • Structural architecture and diagenesis in fault zones developed in poorly cohesive to fully lithified siliciclastic rocks: paleohydrological and paleoseismological implications. • Physical stratigraphy and facies analysis of tidal deposits • High-resolution quantitative biostratigraphy of Lower Miocene planktonic foraminifera from low latitude Atlantic Ocean ODP sites 	
Training objectives	The PhD students in Earth Sciences will carry out experimental activities and classes in several fields of the Geosciences, using both classic and innovative approaches.	
Academic degree required	Laurea pursuant to the previous university system, laurea specialistica or laurea magistrale, or a foreign academic qualification that has been recognized as equivalent	
Positions put out to competition		
With scholarship	6	
TOTAL	6	
Scholarship types	No.	Description (funding entity and research topic, if any)
	2	Scholarships of the University of Parma
	3	Funded by the “Macedonio Melloni” Department of Physics and Earth Sciences
	1	Co-funded by Fondazione Cariparma
Admission procedures	Assessment of QUALIFICATIONS: up to 40 points ORAL EXAM: up to 80 points Minimum score for ELIGIBILITY: 70/120	
Interview via teleconference for candidates residing abroad	THE ORAL EXAM MAY BE HELD <u>VIA VIDEOCONFERENCE</u> FOR CANDIDATES RESIDING ABROAD THE INTERVIEW MAY BE HELD ALSO IN ENGLISH. (the relevant request shall be submitted using the form attached to the competitive examination announcement)	

List of QUALIFICATIONS to be submitted and their assessment	Graduation thesis	Abstract of the graduation thesis (mandatory qualification)	Up to 10 points
	Graduation mark	Score based on the graduation mark - 110 and 110 with honours: 10 points; - from 107 to 109: 9 points; - from 105 to 106: 7 points; - from 100 to 104: 5 points; - from 95 to 99: 2 points; - under 99: 1 point	Up to 10 points
	Average of exam marks (if the candidate is enrolled subject to condition)	Score relating to the mark average: - from 29 to 30: 10 points; - from 27 to 28,9: 9 points; - from 26,5 to 26,9: 7 points; - from 26 to 26,4: 5 points; - from 25 to 25,9: 2 points; - under 99: 1 point	Up to 10 points
	Curriculum Vitae et studiorum and other qualifications	Covering the candidate's university career and postgraduate experience, accompanied with a statutory declaration in lieu of the certification of the exams sat and passed, with the relevant marks, as well as the final graduation mark (mandatory qualification)	Up to 15 points
	Research Project	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focus on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. <u>It shall amount to no commitment on the subsequent choice of the doctoral thesis</u>	Up to 3 points
	Reference letters	a maximum of 2 written by University Teachers, Researchers, Heads of Italian and foreign Research Centers	Up to 2 points
Foreign language	Language the fluency of which shall be assessed during the Oral Exam: ENGLISH. The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.		
Schedule of the admission exam	ORAL EXAM DATE: 16 September 2015 TIME: 9:30 am PLACE: Department of Physics and Earth Sciences "Macedonio Melloni" – Plexus of Earth Sciences Parco Area delle Scienze, 157/A – 43124 PARMA, ITALY		

Oral Exam topics

The Oral Exam will be structured so as to verify the candidates' background and maturity, with specific focus on their Laurea Graduation Thesis and on the research project submitted by the candidates.