# Corso di Dottorato in SCIENZE DELLA TERRA E MECCANICA DEI FLUIDI PhD Program in EARTH SCIENCE AND FLUID MECHANICS

### STUDENT TRANSCRIPT OF RECORDS

**FAMILY NAME: Fantini** 

NAME: Adriano CYCLE: XXXI

SUPERVISOR/INSTITUTION: Erika Coppola (ICTP-ESP)

CO-SUPERVISOR/INSTITUTION:

#### Annual exams and admission to the final exam

	Result	Date	Signature of the Coordinator
I year	Passed and admitted to the II year	08/09/16	Suevio
II year	Passed and admitted to the III year	14/09/17	French Offen
III year	Passed and admitted to the refereeing process	17/09/18	Horpito Ofen
Admission to the final exam	Admitted	15/02/19	Forth Ofen

#### Final exam: evaluation of the committee

	Evaluation	Date	Signature of the Committee Chair
Final exam	Approved cum laude		On behalf the Chair  Frome Abound



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# **Personal activities** (personal training plan approved by the Faculty on 29/10/15)

l year	Title	ECTS	hours
Courses	1 Numerical Methods 1	6	30
	2 Numerical Methods 2	5	24
	3 Earth System Modelling	7	36
	4 Atmospheric Dynamics	6	30
Summer school / workshop / conference	EGU GENERAL ASSEMBLY 2016 (WIEN, SPEAKER)	6+5	30
	ICRC-CORDEX 2016 (STOCKHOLM)	4	20
	CLIVAR-ICTP (TRIESTE)	5	25
	8 <sup>th</sup> RegCM WORKSHOP (TRIESTE, SPEAKER)	10+5	50
	EMS2016 (TRIESTE, SPEAKER)	5+5	25
Attended Seminars (at least 4)	Brian HOSKINS - Lectures 1,2 and 3	0.75	
	Tomislava VUKICEVIC - MODELING OF MODEL UNCERTAINTY AS PATHWAY TO IMPROVING MODELS	0.25	
	Emanuela PICHELLI - MESOSCALE MODELS APPLICATIONS IN THE MEDITERRANEAN AREA	0.25	
	Valerio LUCARINI - RESPONSE AND FLUCTUATIONS IN GEOPHYSICAL FLUID DYNAMICS	0.25	
FORM			
I year – report and oral presentation		2	
I year – development of thesis project		24	
Other activities	Paper in Climate dynamics, first author: Assessment of multiple daily precipitation statistics in ERA-Interim driven Med-CORDEX and EURO-CORDEX experiments against high resolution observations	20	
Total		110.5	

II year	Title	ECTS	hours
Courses			
Summer school / workshop / conference	EGU GENERAL ASSEMBLY 2017 (WIEN)	6	
	Fourth Workshop on Water Resources in Developing Countries: Hydroclimate Modeling and Analysis Tools (TRIESTE, speaker and lab assistant)	12+5	





	10th HyMeX Workshop, 4-7 July 2017 (BARCELONA)	4+5	
Attended Seminars (at least 4)	enka Novakova - STORM TRACK LIFECYCLE AND STEAD-STATE BAROCLINIC ADJUSTMENT	0.25	
	Stefano Luzzato - CHAOTIC SEMINAR: CHAOS AND PREDICTABILITY IN MATHEMATICAL MODELS	0.25	
	Filippo Giorgi - BASIC NOTION SEMINAR: GLOBAL WARMING: SCIENTIFIC EVIDENCE, ATTRIBUTION AND UNCERTAINTIES	0.25	
	Giovanni Tumolo - PROGRESS AND CHALLENGES WITH THE NEXT GENERATION NONHYDROSTATIC DYNAMICAL CORE	0.25	
	Matthew England - ROLE OF TRADE WIND VARIATIONS IN PACIFIC AND GLOBAL DECADAL CLIMATE VARIABILITY	0.25	
	Alessandra Giannini - ESSAYS ON CLIMATE CHANGE IN THE SAHEL: PAST, PRESENT AND FUTURE	0.25	
	Lin Wang - INTERDECADAL VARIATIONS OF THE SILK ROAD PATTERN	0.25	
FORM	Il contratto di apprendistato di alta formazione e ricerca - dott. M. Tritta; Strumenti e strategie per la ricerca attiva del lavoro - dott. G. Portosi	0.4	2
	Corso COMUNICARE LA SCIENZA in collaborazione con il LIS Laboratorio dell'Immaginario Scientifico	0.8	4
II year - report and oral presentation		3	
II year – development of thesis project		40	
Other activities			
Total		77.95	

III year	Title	ECTS	hours
Courses			
Summer school / workshop / conference	EGU GENERAL ASSEMBLY 2018 (WIEN, POSTER)	4+5	
	9 <sup>th</sup> RegCM WORKSHOP (TRIESTE, SPEAKER, LAB	10+5	





	ASSISTANT)		
Attended Seminars (at least 4)	Marco Reale - Preliminary results of the RegCM-ES coupled with a Biogeochemical model in the Mediterranean Region	0.25	
	Muntasir Abdalla Ibrahim - Association of O3, PM10 and NO2 to atmospheric weather regime over Berlin	0.25	
	Tadesse Terefe - The contribution of periodic waves on the variability of rainfall and its causes over Abbay river basin	0.25	
	Vikram M. Mehta - Natural Decadal Climate Variability and its Societal Impacts	0.25	
FORM	10 Tips for Preparing a Successful Manuscript with an ACS Editor	0.6	3
	Video Corso "Sicurezza Studenti"	1.6	8
III year – extended abstract of thesis, report and oral presentation		4	
III year – development of thesis project		45	
Other activities	Coauthor of: The European mountain cryosphere: A review of its current state, trends, and future challenges	20	
Total		96.2	

#### Note:

FORM=educational activities organized by the University of Trieste and aimed to providing PhD students with interdisciplinary competencies in the field of research management and exploitation, intellectual property, and knowledge of European and International research systems.



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### **Training activities**

Course/ school/ attended seminar/ workshop/ etc.	ECTS	Evaluation (1-10)	Date	Instructor	Signature of the Supervisor
Numerical Methods 1	7	9	10/12/16	Coppola, Mariotti Pilati	Cale Glole
Numerical Methods 2	5	7	16/4/16	Tumolo, Giuliani, Mariotti	Cale Offole
Earth System Modelling	6	8	01/06/16	Tompkins, Coppola, Farneti, Solmon Tumolo Giuliani	Cale Offole
Atmospheric Dynamics	6	8	25/04/16	Kucharski	Cale Glole
EGU General Assembly 2016 (Wien, speaker)	6+5		17–22 April 2016		Cale Glole
ICRC-CORDEX 2016 (Stockholm)	4		17-20 May 2016		Cale Glole
CLIVAR-ICTP (TRIESTE)	5		16-20 November 2015		Cale Glole
Eighth ICTP Workshop on the Theory and Use of Regional Climate Models (Trieste, speaker)	10+5		23 May – 3June 2016	Erika Coppola	Cale Glole
EMS2016 (Trieste, speaker)	5+5		12–16 September 2016		Cale Glole
Salam Lectures 2016	0.75		3-4-5 May 2016	Brian Hoskins	Cale Glole
MODELING OF MODEL UNCERTAINTY AS PATHWAY TO IMPROVING MODELS	0.25		6 May 2016	Tomislava VUKICEVIC	Calu Glole
MESOSCALE MODELS APPLICATIONS IN THE MEDITERRANEAN AREA	0.25		22 February 2016	Emanuela PICHELLI	Cale Glole Cale Glole
RESPONSE AND FLUCTUATIONS IN GEOPHYSICAL FLUID DYNAMICS	0.25		15 February 2016	Valerio LUCARINI	Calu Glole
Assessment of multiple daily precipitation statistics in ERA-Interim driven Med-CORDEX and EURO-CORDEX experiments against high resolution observations	20		Published Dec 2016	Authors: Adriano Fantini, Francesca Raffaele, Csaba Torma, Sara Bacer, Erika Coppola, Filippo Giorgi, Bodo Ahrens, Clotilde Dubois,	Calu Offole





			Enrique Sanchez, Marco Verdecchia	
SECOND YEAR BELOW		 		
EGU GENERAL ASSEMBLY 2017 (WIEN)	6	23-28 April 2017		Calu Glole
Fourth Workshop on Water Resources in Developing Countries: Hydroclimate Modeling and Analysis Tools (TRIESTE, speaker and lab assistant)	12+5	12-23 June 2017	Erika Coppola	Cala Offole
10th HyMeX Workshop (BARCELONA, speaker)	4+5	4-7 July 2017		Calu Glole
STORM TRACK LIFECYCLE AND STEADY- STATE BAROCLINIC ADJUSTMENT	0.25	10 November 2016	Lenka Novakova	Cale Glole
CHAOTIC SEMINAR: CHAOS AND PREDICTABILITY IN MATHEMATICAL MODELS	0.25	16 November 2016	Stefano Luzzato	Cale Glole
BASIC NOTION SEMINAR: GLOBAL WARMING: SCIENTIFIC EVIDENCE, ATTRIBUTION AND UNCERTAINTIES	0.25	14 March 2017	Filippo Giorgi	Cala Glole
PROGRESS AND CHALLENGES WITH THE NEXT GENERATION NONHYDROSTATIC DYNAMICAL CORE	0.25	20 March 2017	Giovanni Tumolo	Cala Glole
ROLE OF TRADE WIND VARIATIONS IN PACIFIC AND GLOBAL DECADAL CLIMATE VARIABILITY	0.25	19 April 2017	Matthew England	Cale Gole
ESSAYS ON CLIMATE CHANGE IN THE SAHEL: PAST, PRESENT AND FUTURE	0.25	23 May 2017	Alessandra Giannini	Cale Gole
INTERDECADAL VARIATIONS OF THE SILK ROAD PATTERN	0.25	19 July 2017	Lin Wang	Cale Gole
THIRD YEAR BELOW		 		
EGU GENERAL ASSEMBLY 2018 (WIEN, POSTER)	4+5	9–13 April 2018		Calu Globe
9 <sup>th</sup> RegCM WORKSHOP (TRIESTE, SPEAKER, lab assistant)	10+5	28 May - 8 June 2018	Erika Coppola	Cala Glole
Preliminary results of the RegCM-ES coupled with a Biogeochemical model in the Mediterranean Region	0.25	13 Nov 2017	Marco Reale	Cale Offole
Association of O3, PM10 and NO2 to atmospheric weather regime over Berlin	0.25	5 December 2017	Muntasir Abdalla Ibrahim	Calu Globe
The contribution of periodic waves on the variability of rainfall and its causes over Abbay river basin	0.25	2 March 2018	Tadesse Terefe	Calu Glole
Natural Decadal Climate Variability and its Societal Impacts	0.25	30 May 2018	Vikram M. Mehta	Cala Gole



The European mountain	20	Pub	blished Mar	Gala Glole
cryosphere: A review of its current		201	18	The state of
state, trends, and future challenges				

#### Notes:

For each seminar please insert the name of the speaker, for a conference the name of the local organizer.

### **ADDENDUM: Training and scientific activities and referred ECTS**

Training Activities	ECTS
Course 30 hours with exam	6
Course 15 hours with exam	3
Summer School / workshop / conference (1 day: 5 hours)	1
Attended seminar	0.25
FORM (5 hours per each year)	3
I year - development of thesis project	24
I year - report and oral presentation	2
II year - development of thesis project	40
II year - report and oral presentation	3
III year - development of thesis project	40
III year – extended abstract of thesis, report and oral presentation	4
Scientific Activities	ECTS
Abstract in international conference	5
Poster in international conference	5
Proceedings international conference with peer review	10
Paper on ISI/SCOPUS journal on research activity not directly related to the PhD project	20
Paper on ISI/SCOPUS journal on research activity directly related to the PhD project	50
Delivered seminar (on invitation)	5
Awards	10
Visiting periods in qualified institutions abroad (1 month)	2
Tutoring activity for undergraduate students (5 hours)	1



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#### Notes:

Total ECTS to be completed for the PhD course = 180 (60 per year).

20% of ECTS planned for each year can be acquired in the previous or in the following year.

1 ECTS = 5 hours of frontal training (lesson) plus 15 hours of study plus 5 hours for exam preparation (example for a course)