



UNIVERSITÀ
di **VERONA**

PHD School
in **NATURAL SCIENCES
AND ENGINEERING**

PhD Day

June 17, 2019

Program

9:00 – 9:15 Opening (Sala Verde – Cà Vignal 2)

Welcome address - Prof.ssa Gloria MENEGAZ – Director of the Graduate School

Welcome address - Prof. Mario PEZZOTTI– Vice-Rector for Research

9:10 – 9:25 Prof. Davide SANGIORGI – Scientific Committee – University of Bologna

“Some facts about my past, a few advices about your future”

9:25 – 9:40 Prof. Enrico MARTINOIA – Scientific Committee – University of Zurich

“What is important to be a good scientist?”

9:40 – 9:55 Prof. Alvisè BENEDETTI – Scientific Committee – University of Venice

“The future of the students: a successful case”

10:00 – 12:30 Poster Session

12:30 – 13.30 Lunch Break

14:00 – 16:30 Poster Session

16:30 – 17:30 Best Poster Award (Sala Verde- Cà Vignal 2)

17:30 – 17.45 Panel discussion and closing remarks

17:45 – 18.15 Jam session

18:00 – 19.00 Closing party



Poster session **10:00 – 12:30**

**PhD Program in
Biotechnology**

BAGGIO	Greta	XXXII	METABOLOMICS INVESTIGATION OF Stenotrophomonas maltophilia SeITE02 EXPOSED TO SELENITE	1A
CECCHIN	Michela	XXXII	LPA2: a key factor in PSII assembly in Chlamydomonas reinhardtii	2A
COSENTINO	Emanuela	XXXII	Extraction of High Molecular Weight DNA for long molecule analysis	3A
MARCOLUNGO	Luca	XXXII	Genome assembly based on next generation sequencing and mapping technologies	4A
NEGRI	Stefano	XXXII	The plant serotonin pathway Towards a biological role for fruit indolamines	5A
BELLAMOLI	Francesco	XXXIII	Identification of putative G-proteins in green microalgae by genome analysis	6A
BOTTURI	Alice	XXXIII	Effect of COD/N ratio on the growth of pure cultures PHA-producers by using real industrial waste as substrate	7A
CIURLI	Andrea	XXXIII	FePO ₄ nanoparticles as a source of nutrients: effects on plant transcriptome and on soil microbial communities and functions	8A
CONCA	Vincenzo	XXXIII	Integration of polyhydroxyalkanoates production in the sidestream treatment of anaerobic digestion reject water	9A
DANZI	Davide	XXXIII	Empty Cowpea Mosaic Virus-based particles as potential nanotools for plant protection against diseases	10 A

	FERNANDES RIBEIRO	Rui Pedro	XXXIII	From molecules to systems biology: the effect of drug-receptor interactions on metabolic pathways	11 A
	ALFANO	Massimiliano	XXXIV	Cas9-mediated, PCR-free and long-read targeted nanopore sequencing for repeat expansion analysis	12 A
	BINATTI	Eleonora	XXXIV	Formulation of WPI particles: a potential way to reduce adverse effects induced by radiation therapy	13 A
	BOMBARDI	Luca	XXXIV	Molecular and structural properties of centrin 2 from Toxoplasma gondii	14 A
	DUSI	Valentina	XXXIV	Signaling peptides and miniproteins as controlling factors of fruit development	15 A
	GUARDINI	Zeno	XXXIV	Construction of Arabidopsis thaliana mutants devoid of the major antenna system LHCII	16 A
	LAVEZZARI	Denise	XXXIV	Comparison of available variant caller software using exomes data	17 A
PhD Program in Computer Science	SPELLINI	Stefano	XXXIV	Application of Electronic Design Automation Techniques to Production Plants	18 A
	CARLETTI	Marco	XXXII	Recognition Self-Awareness for Active Object Recognition	19 A
	MOCCI	Jacopo	XXXII	PI-Shaped LQG Control Design for Adaptive Optics Systems	20 A
	DEMROZI	Florenc	XXXII	An IoT based Virtual Coaching System for assisting Activities of Daily Life	20 B
	MANTOVANI	Matteo	XXXII	Data Mining Techniques for Patterns on Clinical Data	19 B
	APARO	Antonino	XXXIII	TEDAR: Temporal dynamic signal detection of adverse reactions	18 B

	BURO	Samuele	XXXIII	On the Multi-Language Construction	17 B
	CENTOMO	Stefano	XXXIII	Industrial-IoT Data Analysis Exploiting Electronic Design Automation Techniques	16 B
	DULECHA	Tinsae Gebrechristos	XXXIII	NeuralRTI: Neural encoding and relighting of RTI data	15 B
	GINESI	Michele	XXXIII	Inference of Surgical Gestures Autonomous Robotic Surgery	14 B
	CANCELLIERI	Samuele	XXXIV	CRISPRitz Rapid, high-throughput, and variant-aware in silico off-target site identification for CRISPR genome editing	13 B
	JOPPI	Christian	XXXIV	SIMCO: similarity-based object counting	12 B
	MARCHESINI	Enrico	XXXIV	Deep Reinforcement Learning in Discrete Action Space for Robotics	11 B
	MAZZI	Giulio	XXXIV	Eos The first CDSAT-based SMT/SMA-solver	10 B
	MENEGOZZO	Giovanni	XXXIV	Automatic process modeling Automatic process modeling with time delay neural network based on low-level data	9B
	MENSI	Antonella	XXXIV	A dissimilarity-based Multiple Instance Learning approach for Protein Remote Homology Detection	8B
PhD Program in Nanoscience and Advanced	CHISTE'	Elena	XXXII	Porous silicon light emitting microparticles for biomedical applications	7B
	NODARI	Alice	XXXII	Growth arrest-specific 6 (Gas6) suppresses basal-like breast cancer	6B

Technology	PODDA	Rachele	XXXII	Resting state functional magnetic resonance imaging study on Amyotrophic Lateral Sclerosis murine model: preliminary considerations on brain connectivity	5B
	CAPPELLOZZA	Enrica	XXXIII	An innovative bioreactor for biodistribution studies in skin explants	4B
	BISWAS	Reetuparna	XXXIV	Comparing different isolation techniques of Adipose tissue as Mesenchymal Stem cell Source	3B
	GEROSA	Marco	XXXIV	Characterization and functionalization of nanoparticles used for hyperthermic treatment and as switchable contrast agent	2B



Poster session: **14:00 – 16:30**

**PhD Program in
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PEROZENI	Federico	XXXII	In vitro and in vivo investigation of chlorophyll binding sites involved in non-photochemical quenching in <i>Chlamydomonas reinhardtii</i>	1A
STRAZZERA	Giuseppe	XXXII	Optimization of Volatile Fatty Acids production from urban bio-wastes for the biorefinery supply chain	2A
TRANDE	Matteo	XXXII	Determination of metal stoichiometry in Ca ²⁺ binding protein using Energy Dispersive X-ray Fluorescence (EDXRF)	3A
ZORZI	Gianluca	XXXII	Response mechanisms to heavy metals in hypertolerant and hyperaccumulator plants	4A
FORESTI	Chiara	XXXIII	Regulatory network behind the berry ripening: the role of <i>Vitis vinifera</i> NAC60 transcription factor	5A
LUZZINI	Giovanni	XXXIII	Influence of grape origin, yeast strain and vintage on aroma composition variability of single vineyard red wines obtained from Valpolicella autochthonous grapes	6A
MAESTRI	Simone	XXXIII	Set-up of analysis pipelines for genome-wide Copy Number Variations detection across different organisms	7A
VECCHI	Valeria	XXXIII	Genetic analysis of the <i>Chlamydomonas</i> as2.1 “pale green mutant” by genome editing and complementation	8A
ZULIANI	Luca	XXXIII	Production of Saffron metabolites in <i>Chlamydomonas reinhardtii</i>	9A
MARANO	Viviana	XXXIV	Exploitation of bacterial biodiversity of As-contaminated soils for the perfection of a bioremediation strategy	10 A

	MAURIZIO	Vanessa	XXXIV	Study of biofilm formation in <i>Pseudomonas syringae</i> pv. <i>actinidiae</i> and role of the LuxR solos in this process	11 A
	MORA	Riccardo	XXXIV	Dissecting genetic determinants for heat stress resilience in grapevine	12 A
	NAJAFI	Samaneh	XXXIV	Plant regeneration from protoplasts and genome editing application in grapevine	13 A
	ONIRETI	Jacob Olaleye	XXXIV	New Roles of Ubiquitylation at Cellular Membranes	14 A
	TROIANO	Eleonora		Exploration and exploitation of microbial diversity in wine production chain	15 A
PhD Program in Computer Science	MENGONI	Riccardo	XXXII	Quantum Annealing approach to the Minimum Spanning Tree problem with Maximal Degree Constraint	16 A
	DE ROSSI	Giacomo	XXXII	Surgical Action Recognition with Spatiotemporal Convolutional Neural Networks	17 A
	ROSSI	Massimiliano	XXXII	On Lempel-Ziv Decompression in Small Space	18 A
	SARTEA	Riccardo	XXXII	A Multi-Agent Approach to Behavior Analysis for Cyber-Security	19 A
	MARASTONI	Niccolò	XXXIII	A Deep Learning Approach to Program Similarity	20 A
	MARIN	Riccardo	XXXIII	Low-n-Browse From 3DMMs registration to shape generation	20B
	MELI	Daniele	XXXIII	Bayes inference for autonomous action sequence in surgery A surgical training task	19B
	MUNTEANU	Andrei	XXXIII	Runtime Enforcement for Control System Security: A Formal Approach	18B

	OCAMPO PINEDA	Mario Alberto	XXXIII	Reducing false-positive connections using hierarchical microstructure-informed tractography	17B
	MURARI	Matteo	XXXIV	A Reinforcement Learning Approach to Analyze Intelligent Agent Behaviors	16B
	PASETTO	Luca	XXXIV	Semantically-Guided Goal-Sensitive reasoning: Idia and SGGS-proofs	15B
	PICCINELLI	Nicola	XXXIV	Autonomous Surgeon Assistance in Minimally Invasive Surgical Procedure	14B
	ROBERTI	Andrea	XXXIV	Medical Slam in Minimally Invasive Surgery Autonomous Robotic Surgery	13B
	ARCERI	Vincenzo	XXXII	Abstract interpretation-based string executability analysis for JavaScript	12B
	TEFERA	Yonas Teodros	XXXIV	3D Augmented Reality Interfaces for Remote Robotic Teleoperation	11B
	VESENTINI	Federico	XXXIV	Planning with Real-Time Collision Avoidance for Cooperating Agents under Rigid Body Constraint	10B
PhD Program in Nanoscience and Advanced Technology	VIERO	Alessia	XXXII	Radiological applications in Forensic Anthropology Fracture healing and dating	9B
	VURRO	Federica	XXXII	Nanostructures with hyperthermic properties for biomedical applications	8B
	PALACIO GUTIERREZ	Covadonga	XXXIII	Simultaneous analysis of potassium and ammonium ions in the vitreous humour by capillary electrophoresis and their integrated use to infer the post mortem interval (PMI)	7B
	SHESTAKOVA	Kseniia	XXXIII	Development of a new screening method for determination of illegal drugs including novel NPSs and their metabolites in urine by means of UPLC-MS/MS	6B
	REPELLIN	Mathieu, Gérard, Louis	XXXIV	Hyaluronic acid-based nanocomplexes as an innovative drug delivery strategy for treating myotonic dystrophy	5B

	XXXXX	Vikash Kumar	XXXIV	Superstrate Sb2Se3 based solar cells by thermal evaporation	4B
	DAI PRE	Elena	XXX	Characterization of micrografts derived from mechanical processed lipoaspirates	3B
	SCHIJVEN	Laura	<i>Visiting phd student</i>	Shining light on Gold nanoparticles	2B