

## Programme

# 19<sup>e</sup> Rencontres Virologie Végétale - RVV 2023



15 au 19 janvier 2023, Aussois – France

## Thématiques

- Keynote invited speakers
- Evolution virale - Virus evolution
- Variabilité/diversité des virus & épidémiologie - Virus variability/diversity & epidemiology
- Résistance & silencing - Resistance & silencing
- Interaction virus/cellule & mouvement - Virus-cell interaction & within plant movement
- Interaction virus-vecteur - Virus-vector interaction

### Dimanche 15 janvier 2023

A partir de 17h00	Accueil des participants et mise en place des posters
19h15 - 20h15	Apéritif de bienvenue
A partir de 20h00	Dîner

### Lundi 16 janvier 2023

8h30	Ouverture du colloque
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#### Session 1 : Modérateur Thierry Candresse

8h45	<b>K-01</b>	<b>Keynote 1 : Simon Roux</b> US Department of Energy Joint Genome Institute, Berkeley, Etats-Unis <i>Discovering new RNA virus genomes with 'omics: why, how, does it matter ?</i>
9h30	<b>O-01</b>	<b>Johan Rollin</b> <i>Monitoring cross-contamination in viral metagenomic data using an alien-control</i>
9h45	<b>O-02</b>	<b>Yu Fu</b> <i>Characterization of the role of Stylin-01 cuticular protein in the transmission of two noncirculative plant viruses using different - CRISPR-Cas9 mutant aphid lineages</i>
10h00	<b>O-03</b>	<b>Justine Charon</b> <i>RdRp-scan: A bioinformatic resource to identify and annotate divergent RNA viruses in metagenomic sequence data</i>
10h15		<i>Pause</i>

#### Session 2 : Modératrice Maria Dimitrova

10h45	<b>K-02</b>	<b>Keynote 2 : Marylène Mougel</b> Institut de Recherche en Infectiologie de Montpellier, France <i>Fate and destination of retroviral genomic RNA in host cells</i>
11h30	<b>O-04</b>	<b>Déborah Bernard</b> <i>Identification of A. thaliana ALY proteins as novel host interacting partners of the turnip yellows virus (TuYV) CP and CP-RT proteins</i>
11h45	<b>O-05</b>	<b>Thomas Armand</b> <i>Synergistic interactions between Wheat dwarf virus and Barley yellow dwarf virus-PAV in wheat</i>
12h00	<b>O-06</b>	<b>Selim Ben Chehida</b> <i>Reconstructing the Mastrevirus communities structure in La Reunion: The tale of agricultural associated pathogens</i>
12h15	<b>O-07</b>	<b>Khalid Amari</b> <i>Application of epigenetics to control plant pathogens: a case study of viruses</i>
12h30		<i>Déjeuner - Après-midi libre</i>

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### Session 3 : Modérateur Benoît Moury

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17h15	<b>K-03</b>	<b>Keynote 3 : Ruben Gonzalez</b> Institut de Biologie de l'Ecole Normale Supérieure, Paris, France <i>Impact of Arabidopsis thaliana developmental stage on Turnip mosaic virus evolution</i>
18h00	<b>O-08</b>	<b>Babil Torralba</b> <i>Reassortments in an octapartite plant virus model</i>
18h15		<b>Présentation éclair des posters étudiants (numéros impairs)</b>
18h30		<b>Session posters (numéros impairs)</b>
20h00		<i>Dîner</i>

## Mardi 17 janvier 2023

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### Session 4 : Modérateur Mikhail Poogjin

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8h30	<b>K-04</b>	<b>Keynote 4 : Emanuela Noris</b> Institute for Sustainable Plant Protection, National Research Council of Italy (IPSP-CNR), 10135 Turin, Italie <i>Novel insight in the virus-mediated export of plant chromosomal DNA</i>
9h15	<b>O-09</b>	<b>Syed Shan-e-Ali Zaidi</b> <i>Geminivirus infection induces transposon-derived extrachromosomal circular DNA in plants</i>
9h30	<b>O-10</b>	<b>Noun Magdy Ibrahim Fouad</b> <i>Characterization of the vector-mediated transmission of a betasatellite between different helper begomoviruses</i>
9h45	<b>O-11</b>	<b>Seydou Sawadogo</b> <i>Artificial intelligence tool for cassava viral diseases diagnosis using participatory surveillance in Burkina Faso</i>
10h00	<b>O-12</b>	<b>Elise Lepage</b> <i>Thesis in progress : Understanding the role of natural reservoirs in the epidemic and evolutionary dynamics of generalist agricultural pathogens</i>
10h15		<i>Pause</i>

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### Session 5 : Modératrice Virginie Ravigné

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10h45	<b>K-05</b>	<b>Keynote 5 : Simon Dellicour</b> Spatial Epidemiology Lab, Université libre de Bruxelles (ULB), Bruxelles, Belgique <i>Molecular epidemiological approaches to investigate the dispersal dynamic of viruses and the environmental factors impacting it</i>
11h30	<b>O-13</b>	<b>Gaël Thébaud</b> <i>Simulated dynamics of the within-host diversity of viral sequences</i>
11h45	<b>O-14</b>	<b>Kyoka Kuroiwa</b> <i>An iterative gene editing strategy broadens eIF4E1 genetic diversity in Solanum lycopersicum, triggering resistance to several potyvirus isolates</i>
12h00	<b>O-15</b>	<b>Mélia Bonnamy</b> <i>Impact of the physiological state of the host plant on the genome formula of a nanovirus</i>
12h15	<b>O-16</b>	<b>Sarah Grauby</b> <i>Barley intercropped with clover: bottom-up regulation of Rhopalosiphum padi and impact on the spread of Barley yellow dwarf virus-PAV</i>
12h30		<i>Déjeuner - Après-midi libre</i>

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### Session 6 : Modératrice Cécile Desbiez

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17h15	<b>O-17</b>	<b>Manfred Heinlein</b> <i>dsRNA-induced immunity targets plasmodesmata and is suppressed by viral movement proteins</i>
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17h30	<b>O-18</b>	<b>Chantal Nyirakanani</b> <i>A nationwide analysis of the Ugandan cassava brown streak virus genomes in Rwanda suggests an association of the virus population with the deployment of tolerant cassava cultivars</i>
17h45	<b>O-19</b>	<b>Mathilde Villegas</b> <i>Detection of the M-Rep protein of a Nanovirus in the midgut cells of its aphid vector</i>
18h00	<b>O-20</b>	<b>Guillaume Lafforgue</b> <i>Comparative study of mutational robustness between ordered and disordered regions of viral proteins</i>
18h15		<b>Présentation éclair des posters étudiants (numéros pairs)</b>
18h30		<b>Session posters (numéros pairs)</b>
20h00		<i>Dîner</i>

## Mercredi 18 janvier 2023

### Session 7 : Modératrice Annette Niehl

8h30	<b>K-06</b>	<b>Keynote 6 : Jens Tilsner</b> Biomedical Sciences Research Complex, The University of St. Andrews, St. Andrews, Royaume-Uni <i>New insights into plant virus RNA movement</i>
9h15	<b>O-21</b>	<b>Sylvie German-Retana</b> <i>Lipid droplets: new actors of the plant virus infection</i>
9h30	<b>O-22</b>	<b>Oumaima Moubset</b> <i>Virome release of an invasive exotic plant species in Southern France</i>
9h45	<b>O-23</b>	<b>Mailys Piau</b> <i>Identification of plant proteins interacting with the grapevine fanleaf virus homing protein 2AHP during the hypersensitive response in Nicotiana occidentalis</i>
10h00	<b>O-24</b>	<b>Atiwich Patthamapornsirikul</b> <i>In vivo mitigating the incidence of French Tomato leaf curl New Delhi virus (ToLCNDV) using melon cucumis melo as a model</i>
10h15		<i>Pause</i>

### Session 8 : Modératrice Véronique Brault

10h45	<b>K-07</b>	<b>Keynote 7 : Anna Whitfield</b> Entomology and Plant Pathology, North Carolina State University, Raleigh NC, Etats-Unis <i>Towards defining the viral and vector determinants of tomato spotted wilt virus transmission by thrips</i>
11h30	<b>O-25</b>	<b>Michel Yvon</b> <i>Virus particle populations of a bunyavirales contain all possible genome segments and polarities in highly reproducible proportions.</i>
11h45	<b>O-26</b>	<b>Coline Temple</b> <i>Tomato virus-related risks in diversified vegetable farming systems combining producer's perceptions and virus richness evaluation by High Throughput Sequencing technologies</i>
12h00	<b>O-27</b>	<b>Deborah Schönegger</b> <i>Network analysis of the carrot virome in managed and wild ecosystems</i>
12h15	<b>O-28</b>	<b>Natalia Sukhikh</b> <i>Deep sequencing analysis of virome components and antiviral RNAi responses in Myzus persicae aphids vectoring a plant virus</i>
12h30		<i>Déjeuner - Après-midi libre</i>

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Session 9 : Modérateur Claude Bragard

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- 17h15 **O-29** **Hélène Vassilieff**  
*Automated detection and annotation of caulimovirid endogenous viral elements in plant genomes shed light on the long-term evolution of the Caulimoviridae*
- 17h30 **O-30** **Maxime Verdier**  
*Post-acquisition effects of TuYV and CaMV on an aphid vector*
- 17h45 **O-31** **Philippe Roumagnac**  
*Using African army ants for tracking plant and animal viruses in the deep tropical forest*
- 18h00 **O-32** **Mingshuo Xue**  
*A plant-specific homolog of DP1/Yop1 family proteins plays a proviral role in potyvirus infection*
- 18h15 **O-33** **Olivier Cotto**  
*Combining a mathematical model with field data to characterize epidemiological interactions between strains of the plum pox virus*
- 18h30 **Session posters (numéros impairs et pairs)**
- 20h00 *Dîner*

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**Jeudi 19 janvier 2023**

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Session 10 : Modérateur Manfred Heinlein

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- 9h15 **O-34** **Jean-Luc Gallois**  
*Trying to develop genetic resistances to potyvirus based on S gene: Analysis of redundancy among chloroplastic PhosphoGlycerate Kinase in Arabidopsis.*
- 9h30 **O-35** **Christophe Ritzenthaler**  
*Nanobody-mediated resistance in plants*
- 9h45 **O-36** **Rachid Tahzima**  
*Coarse-grained Analysis of Biophysically Tuned Conformational Ensembles and Structural Properties of Plant Virus Movement Proteins Clarifies Novel Sequence-to-Function Exploration: Insights into the Evolutionary Origins of Plant Viral HSP70hs*
- 10h00 **O-37** **Laura Elvira-González**  
*Plant tolerance to RNA viruses: molecular and genetic determinants*
- 10h15 *Pause*

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Session 11 : Modérateur Olivier Schumpp

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- 10h45 **O-38** **Quentin Chesnais**  
*Do DCL proteins play a role in the viral manipulation of host plant and vectors?*
- 11h00 **O-39** **Alassane Ouattara**  
*Stronger together: Synergy between an emerging monopartite begomovirus and a DNA-B component*
- 11h15 **O-40** **Ana Rocio Sede**  
*Application of RNA-based bioprotectants against viruses for sustainable crop production in a changing climate*
- 11h30 **O-41** **Thierry Candresse**  
*Benchmarking of virome metagenomic analysis approaches using a large, 60+ members, viral synthetic community*
- 11h45 **Remise des prix étudiants**  
*Meilleure communication orale et meilleur poster*
- 12h00 **Bilan colloque**
- 12h15 *Déjeuner*

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