

# Vampire User Event: Introduction

16<sup>th</sup> July 2020

Farzana Hampshire

### **Contents**

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- Update SNCL's position
- Our vision for Vampire
- Meet the Team
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# Housekeeping

- Please stay muted with video off
- Session will be recorded permission assumed
- Reserve questions for Q&A session at end of the presentation
- Final Q&A at end of event for any other questions
- Written questions in chat window also welcome
- If time runs out then please submit written questions in the chat window and we will publish questions and answers after the meeting
- Or submit to <u>vampire@snclavalin.com</u>
- Recording will be sent out after the meeting
- 1. Please raise your hand during Q&A
- 2. If chosen, unmute and turn video on
- 3. Give your name and organisation





# Agenda for today

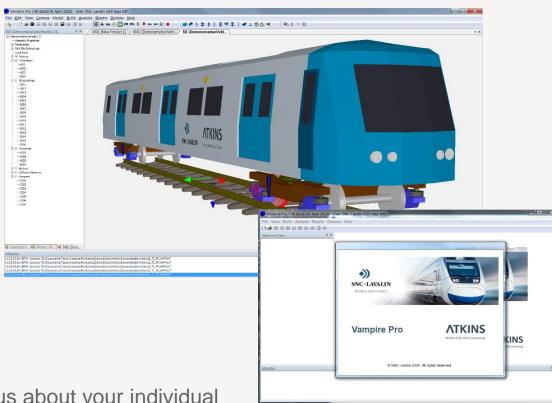
14:00 – 14:20	Introduction	Farzana Hampshire	SNC-Lavalin
14:20 – 14:30	Industry View	Mark Oakley	RSSB
14:30 – 14:50	Keynote Address	Mark Burstow	Network Rail
14:50 – 15:15	Vampire Development Plans	Alan Minnis Ian Hills Paul Molyneux-Berry	SNC-Lavalin
15:15 – 15:30	Break/Video	Alan Minnis	SNC-Lavalin
15:30 – 15:45	Modelling Switches and Crossings: The UoH-CTH Benchmark	Peter Klauser	Vehicle Dynamics Group LLC
15:45 – 16:00	Automation with Vampire: A case study on wagon imbalanced loading	Phil Shackleton	University of Huddersfield
16:00 – 16:15	Longitudinal Vehicle Modelling	Owen Evans	SNC-Lavalin
16:15 – 16:30	User Subroutines for model validation	Phil Rogers	SNC-Lavalin
16:30 – 16:40	Helpdesk and General Management	Yunshi Zhao	SNC-Lavalin
16:40 – 17:00	Final Summary and Q&A	Farzana Hampshire	SNC-Lavalin





## **Update**

- Purchase of Exploitation Licence in March
  - Vampire Pro rebranded to Version 7
  - Licensing, support and development
- Licensing has commenced worldwide
- Support desk set up: <u>Vampire@snclavalin.com</u>
- Product Manager: Yunshi Zhao
- Flexible approach to licensing please speak to us about your individual requirements
  - Includes academic licences for non-commercial users







# Vampire – Our Vision

### Our aim is to provide a service to:

- Offer a flexible and responsive approach to satisfy the needs of our clients;
- Provide industry leading software and technical support;
- Continuously develop the functionality and efficiency of the software







# **Farzana Hampshire**

Team Leader and Vampire
Product Lead
Dynamics specialist involved with
Vampire since 1998

"During lockdown I have discovered that I love vegetable gardening and now spend lots of time in my greenhouse!"







### Ian Hills

Technical Director and
Vampire Development Lead
Microsoft Certified Solution Developer
with over 21 years experience in Vehicle
Dynamics and Software Development.

"I love to escape to the great outdoors: climbing mountains, skiing and kayaking"







### **Alan Minnis**

Worked on Vampire for over 28 years in a range of roles including Developer,
Team Leader and Product Lead.
Some call him Mr Vampire, others
Count Vampire.



"I have been restoring a Triumph Spitfire with a friend for 4 years. Between a nuclear engineer and a railway engineer. What could go wrong?"





### Yunshi Zhao

Vampire Product Manager
An experienced dynamics and gauging engineer, project manager, and data analyst; has a passion for innovation and new applications for Vampire

"I enjoy cooking and was trained at a cooking summer school when I was 17 (even though I forgot everything when I actually started cooking again 4 years later)"







# **Philip Rogers**

Technical Director
Highly experienced dynamics engineer
and Vampire user (25 years); very
knowledgeable, not only in passenger
rolling stock, but also freight and OTMs

"I enjoy outings with my kids, running, walking the dog and modelmaking"







# **Paul Molyneux-Berry**

Experienced Vampire user since 2000. Expert in wheel/rail interaction (including significant analysis around seasonal low adhesion), and safety assurance

"During lockdown, I've photographed 100 species of birds within walking distance of home"







### **Owen Evans**

An expert in vehicle dynamics since 1996 and skilled in using automation features in Vampire and Excel VBA to make life easier - let the machine do the work! Also enjoys the process of creating future Vampire experts

"I play drums and am part of several bands!"







# Jenny Irish

Practice Manager – Engineering Services
Directs and manages technical
consultancy projects, bringing people
together to solve client and industry
technical problems.
20 years' association with Vampire



"I'm a keen dinghy sailor and am enjoying getting back out on the water with family at Carsington Water in Derbyshire"





# **Daniel Derbyshire**

Service Leader
An experienced user of the gauging software, ClearRoute™2, and supports clients to meet the requirements of railway standards, often using Vampire.



"I am mad about cars and football. I also love a walk!"





# **Halley Porkess**

Proficient in both Vampire and Simpack, and has used both programs over the last 10 years to perform vehicle dynamics analysis on a number of new-build and refurbished rolling stock projects in the UK and overseas.

"Outside of work I enjoy playing cricket and running, when I'm not busy with my two sons, aged 4 and 18 months!"







# **Cencen Gong**

A knowledgeable dynamics engineer with 10 years' experience in Vampire; also a trained systems engineer. Skilled in training others in vehicle dynamics and the use of Vampire

"I love cooking and like to make my food look pretty"







### **Daniel Firth**

A senior engineer with strong analytical skills, keen on developing new tools and techniques which often interact with Vampire, to answer challenging questions

"My favourite ways of spending time outdoors are motorcycling, scuba diving, and gardening"







# **Peter Bryant**

Skilled in Vampire vehicle dynamic modelling and simulation, vehicle gauging and project management. Expert at finding the technical solution that answers the client's question

"I enjoy running and cycling, and I'm currently training for the Leicester marathon in October"







# Jim Kay

Brings together a combination of structural, dynamics and testing experience to solve a wide range of problems; this includes developing tools to improve and streamline the use of Vampire

"I enjoy hill and mountain walking, cycling, and photography"







# **Peter Booley**

Skilled in specifying, building and installing instrumentation systems for rail vehicles and railway infrastructure; ensuring that inputs into Vampire are validated and reflect reality

"I am a keen cyclist and hill walker, and I love travel, adventure, friendship and family"







### Stuart Milodowski

One of our newer team members, gaining particular experience in gauging of UK rolling stock and the modelling and analysis of light rail vehicles in Vampire.

"Outside of the working environment, and despite questionable fashion sense, I enjoy playing the flute, hockey and hiking in the peak district"







### **Edward Garner**

Another newer team member who is developing expertise across a wide range of analytical disciplines (dynamics and structures), using simulation tools to achieve solutions to problems.

"I am a board game enthusiast"



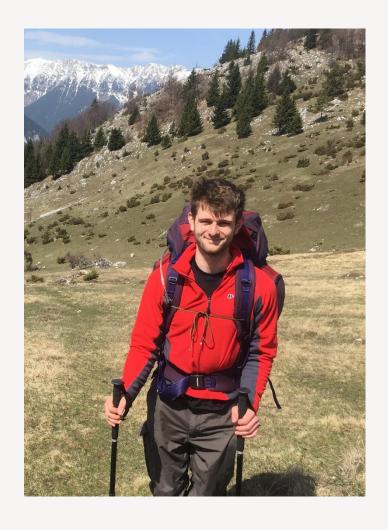




### **Edward John**

One of our Graduate Engineers who has already used Vampire to model our 10 1/4" gauge IMechE Railway Challenge locomotive and on a hybridisation project, demonstrating the accessibility of Vampire to newer users.

"I enjoy cycling, long-distance hiking, and camping. I also have my first Dan in Shodokan Aikido and travelled to Japan to train at the headquarters in Osaka"







### **David Wells**

Client Account Manager, responsible for SNC-Lavalin's commercial relationships with our growing list of current and future Vampire users

"I like to eat good food and read good books. And after four months at home I am looking forward to getting on a train again one day!"







# A few words from Stephen Pell Operations Manager







# Thank you





Our values are the essence of our company's identity. They represent how we act, speak and behave together, and how we engage with our clients and stakeholders.

SAFETY

INTEGRITY

COLLABORATION

INNOVATION

We put safety at the heart of everything we do, to safeguard people, assets and the environment.

We do the right thing, no matter what, and are accountable for our actions.

We work together and embrace each other's unique contribution to deliver amazing results for all.

We redefine engineering by thinking boldly, proudly and differently.





