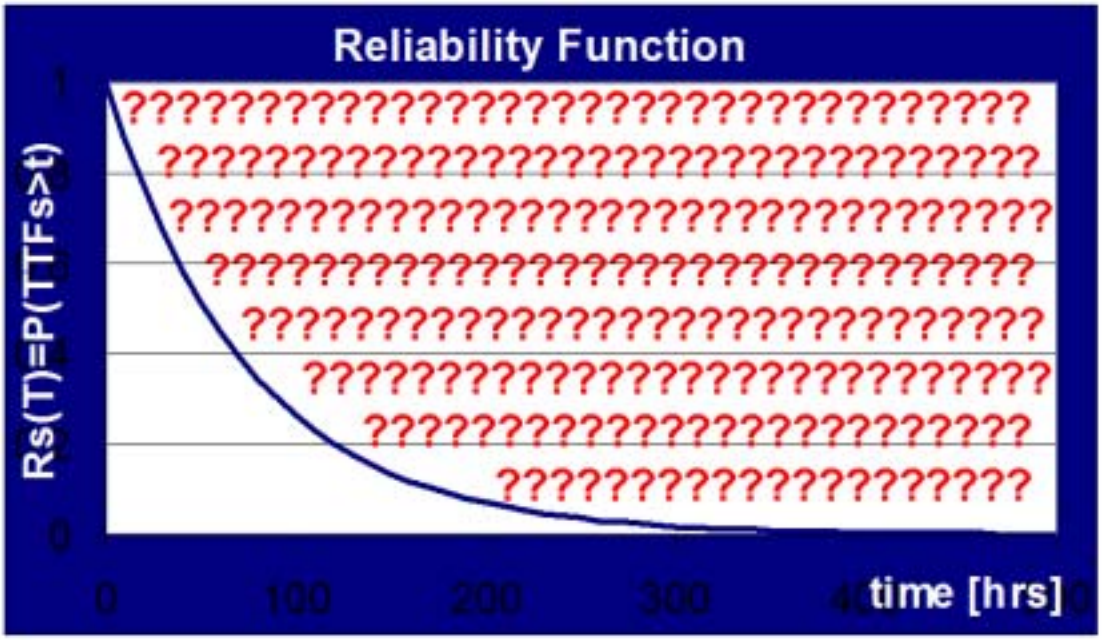
28th MIRCE International Symposium

11 – 12 December 2018, Woodbury Park, Exeter, UK

What is Beyond Reliability Function?



- **Have you ever asked this question?**
  - **If NO, go to Registration Form, now!**
- **Do you know the answer to this question?**
  - **If NO, go to Registration Form, now!**
- **Should you know the answer to this question?**
  - **If YES, go to Registration Form, now!**
- **Do you wish to know the answer to this question?**
  - **If YES, go to Registration form, now!**

Why is it IMPORTANT to know the answer?

Because the occurrence of the first failure event and all subsequent ones generate physically observable changes in the life of a system that are impossible to embrace by the existing approach to Reliability Function. Hence, how could predictions of system reliability in the life long context be "reliable" when physically observable events and associated human rules are totally excluded from the predictions?

Even further, how could system engineering and project management decisions be effective when they are based on the existing "time-to-failure" reliability function only?

The Symposium Programme at Glance

> > > > > Tuesday 11th December 2018 < < < < <	
0830-0900	**Registration and welcome coffee, Colin Chapman, Room, Woodbury Park Hotel,**
0900-1300 **1045-1100 Coffee**	The Reliability Function, $R_s(t)$, defines the reliability of the system as a function of the reliability of its consisting components and their configuration. Such mathematical expression is valid under the following physical reality, ONLY: • Components are mutually independent • No maintenance activities • Continuous operation of a system • First observable failure is a system failure • No environmental impacts on system reliability • No Human impacts on system reliability
1300-1400	**Lunch Break**
1400-1730 **1545-1600 Tea break**	**The occurrence of the first failure brings the following physical reality into the equation for system reliability:** • Dependencies between components • Initiates maintenance activities • Interrupts continuous operation of a system • Component's failure could precede system's failure • Environmental impacts on system reliability • Human impacts on system reliability **Which the existing form of the reliability function cannot embrace at all !!!!!**
1900-1930	**Get Together Sherry Reception at Woodbury Park Hotel**
1930-2230	**Symposium Dinner & MIRCE Akademy Members Christmas Dinner** **F**unctionability **1** - **R**esearch & **E**ducation Centre, of the MIRCE Akademy **MIRCE Science based Announcement and Award** of the • **2018 Formula 1 Driver Functionability Champion** • **2018 Formula 1 Team Functionability Champion**
> > > > > Wednesday 12th December 2018 < < < < <	
0900-1300	**MIRCE Science Philosophy** The philosophy of MIRCE Science is based on the premise that the purpose of existence of any functionable system[1] is to do functionability work. The work is done when the expected measurable function is performed through time. However, experience teaches us that expected work is frequently beset by undesirable negative functionability events, resulting from a variety of negative functionability actions (overstress, wearout, natural events, and human activities). Hence, positive functionability actions must be performed on the systems to enable them to continue doing the work (repairing, testing, replacing, changing the mode of operation and similar). Thus, the complex interactions between positive and negative functionability actions determine functionability performance of functionable systems, which regrettably become known only at the end of functionable system in-service life, when nothing could be done to influence it. Thus the ability to accurately predict functionability performance of the future functionability systems at the design stages would be invaluable to the chief designer's office, as decisions, made there have a direct impact on the expected: work, budget and the expected return on the investment (e.g. profit, public benefit, reputation and similar).
1300-1400	**Lunch Break**
1400-1700	**MIRCE Science answers to the question "What is Beyond Reliability Function?" (scientific, mathematical, computational, educational, technological & professional)**
1700-1730	**Book signing, group photo and departure**

Exeter is the most southwesterly Roman fortified settlement in Britain. Exeter Cathedral was founded in the early 12th century and has several notable features, including an early set of misericords, an astronomical clock and the longest uninterrupted vaulted ceiling in England.

Today, Exeter is identified as one of the top ten most profitable locations for a business to be based or to gain University education.

All prices are in GB Pounds	11 - 12 December		
Service	Price	VAT	Total
Participant	495.00	99.00	**594.00**
Retired participants	295.00	59.00	**354.00**
University students	275.00	55.00	**330.00**
MIRCE Akademy Members	375.00	75.00	**450.00**
MIRCE Akademy Fellows	395.00	79.00	**474.00**
MIRCE Akademy Students	205.00	41.00	**246.00**
Symposium Dinner only	60.00	12.00	**72.00**

Jezdimir Knezevic

Special Christmas present to each paid participant from the MIRCE Akademy

A signed copy of the book "The Origin of MIRCE Science", by J. Knezevic, published by MIRCE Science in December 2017, 232 pages, A4 format, published price £ 50.00.

Physical and mathematical reality of a life of a system beyond the reliability function are fully, presented, analysed, understood and presented through a set of axioms and MIRCE Functionability Formulas that deal with all operational, maintenance and support processes and events expected to take place during the life of a system, currently totally ignored by existing reliability function.

About the Venue

Woodbury Park is a magnificent 500 acre complex set among rolling hills above the South West English coastline, only a few miles from Exeter.

Communication between Exeter and other parts of the United Kingdom are excellent.

By road, the M5 motorway links Exeter to London, the Midlands, Scotland and Wales. Regular rapid coaches run services to and from London and Heathrow Airport.
By rail, a regular fast service is available to and from Exeter (St David's Station) and London (Paddington Station).
By air, Exeter Airport offers regular flights to many British and Continental destinations and is situated near to Woodbury Park.

Travel between Exeter and Woodbury normally requires a car or taxi.

Among the outstanding leisure facilities at Woodbury Park are two golf courses including the magnificent Oaks Championship course, tennis courts, a swimming pool, spa, sauna and fully equipped gymnasium and well appointed lounge areas and bars.

Woodbury Park, Woodbury, Exeter,
EX5 1JJ, United Kingdom

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About the MIRCE Akademy

MIRCE Akademy is an independent research and educational institution devoted to the enhancement and applications of MIRCE Science – theory for predicting functionability performance of functionable system types.

The knowledge and methods of MIRCE Science have benefited designers, manufacturers, constructors, operators, service-providers, regulators and others in the aerospace, automotive, communication, construction, defence, transport, service, utility sectors and other areas of business and government.

Benefits of a scientific based knowledge are experienced through significant increase in system reliability and availability, while drastically reducing costs of making, running and disposing systems.

Phone: + 44 (0) 1395 233 856 Email: quest@mirceakademy.com Web: www.mirceakademy.com

Woodbury Park Hotel & Golf Club, Exeter, EX5 1JJ, UK – home of the MIRCE Akademy

28th MIRCE International Symposium: 11 – 12 December 2018

Reliability Beyond First Failure

Registration Form

Email: quest@mirceakademy.com
Phone: +44 (0) 1395 233 856
Mail: MIRCE Akademy, Woodbury Park, Exeter, EX5 1JJ, United Kingdom
Web site: www.mirceakademy.com

THIS FORM MAY BE COPIED

Please select appropriate level of service and corresponding fee.

Group discounts are available please contact us.

The Symposium Fees includes:

- Attendance
- Symposium Material and Supporting Materials
- Lunches and Light Refreshments
- Book "The Origin of MIRCE Science"
- Christmas Dinner on 11th December
- Free Parking

Value Added Tax (VAT)

Unless special exemption exists, under UK Customs and Excise regulations delegates from all countries are required to pay UK VAT @ 20 % on all courses taking place in the UK. Non-UK delegates may be able to recover VAT incurred via the relevant tax authority in the country of origin of the delegate.

PAYMENT DETAILS

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Special requirements Yes ☐ No ☐

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I understand and accept the registration terms and conditions as shown

Signature _____ Date _____

Terms and Conditions

Substitution of participants may be made at any time. If you intend to do this, please advise the MIRCE Science ('the organiser') as soon as possible. Cancellation of a booking must be received in writing by the organiser at least 14 days before the commencement of the Symposium. MIRCE Science regrets that no refunds or credits will be made after the deadline unless the organiser cancels the Event.

The organiser reserves the right to alter the programme or cancel the Summer School at its discretion. All places offered are subject to availability.