

# Fyzika ve firmě

V jarním semestru 2019 pokračuje **kurz F5900** jehož cílem je představit z blízka i z dálky firmu a instituce, ve které najdou vaše fyzikální znalosti to nejlepší uplatnění.

<http://is.muni.cz/predmet/sci/jaro2019/F5900>

Na zájemce se těší ve **středu od 16:00 v posl. F1**

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**Aircraft Power Management System**

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Advanced Technology Europe  
• Systems Engineering & Applications  
• Electronic Technologies  
• Mechanical & Simulation Technologies  
• Programs

Core Technologies/Competencies  
Air, Thermal & Power Management System:  
• APU: Auxiliary Power Units  
• Engine: Turbojets, Turboprops, Turbofans, Turboprops  
• BMS: Bleed Management Systems

- Gather and analyze customer requirements
- Develop systems architecture
- Conduct trade-off studies
- Run simulations and conduct performance analyses

First Class Detectors

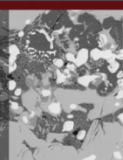
Synthetic YAG crystal

- High efficiency – low noise
- Fast response
- Unlimited lifetime
- Suitable for high vacuum

SE – Everhardt-Thornley type with YAG  
Fast imaging rate (20ns/pix)

Dwell/pix	1Mpix	100 fields analysis
50 us	50 s	> 1 hour
100 ns	0.2 s	< 3 min

Fig. On-line SE/BSE signal mixing



**TESCAN**  
PERFORMANCE IN NANOSPACE

First Class Detectors

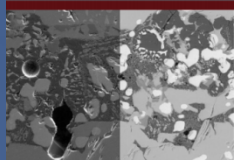
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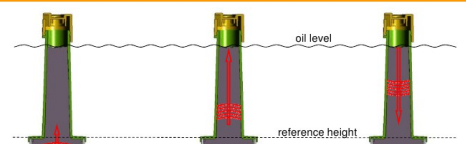
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Ultrasonic Level and Temperature Sensor  
Measuring Principle

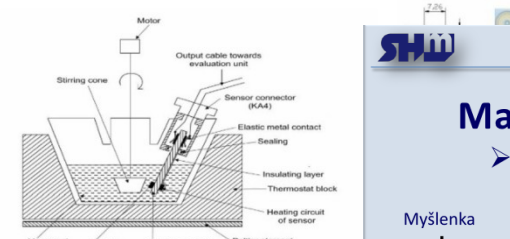


**BVT Technologies**

Experimental arrangement

The use of thermodiffusion for mass transport enhancement. Active part of sensor

Heating and thermistor on the back side of sensor



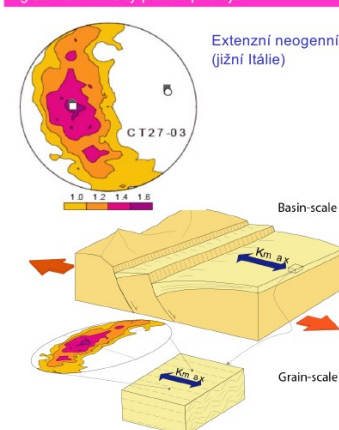
Agico – 3. Příklady použití přístroje

Extenzí neogenní (jižní Itálie)

CT 27-03

Basin-scale

Grain-scale

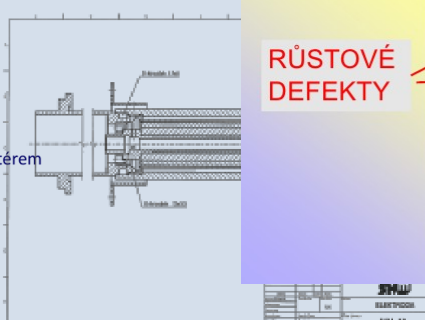


**STW**

Magnetronové napra

➤ vývoj magnetického pole

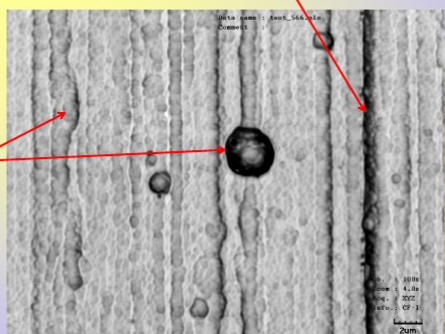
Myšlenka  
↓  
Simulace MP (FEMM)  
↓  
Konzultace s konstruktérem  
↓  
Návrh



**MĚŘENÍ NA REÁLNÉM POVRCHU**

STOPY BROUŠENÍ

RŮSTOVÉ DEFEKTY



reflects the pulse  
pulses the echo,  
(ToF)

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