# ELTEE 2018 International Conference on Evolution of

Functional Performance and Expected LifeTime of Electrical Equipments

# FINAL PROGRAM

## Tuesday, October 16th

09:00 Registration/Breakfast

09:30 Welcome

ENSE3 – Y. MARECHAL,

CEA-LITEN - F. LEFEBVRE-JOUD (to

be confirm)

10:00 Conference Introduction:

H. MOREL – ELTEE Chairman

#### **Session 1: STANDARDIZATION & NEW CHALLENGES**

**10:15** Standardization on Material Efficiency for longer lifespan within circular economy

**10:45** Improving maintenance efficiency and life duration of electrical installation through implementation of Augmented Reality / Remote Expertise functionality

#### 11:15 Coffee Break

#### **Session 2: POWER ELECTRONIC COMPONENTS**

**11:30** Determination of parameters for lifetime evaluation of SiC MOSFETs based power modules

12:00 Toward a static power switch with integrated condition monitoring function Aging laws of electrolytic capacitors

#### 13:00 Lunch

#### **Session 3: ELECTROTECHNICAL COMPONENTS**

**14:30** Distribution transformers Loss of Life under distorting loads

**15:00** Risk analysis of switching on a large transformer on the power grid

**15:30** Improvement of circuit breaker's lifetime by controlled switching and monitoring

**16:00** Ground connections influence on the voltage stress in a PWM-fed motor

#### 16:30 Coffee Break



















#### **KEYNOTE: SURVEY PAPER ON CABLES**

**17:00** New approaches on the underground power cables – Structure, diagnostic techniques, life and reliability prognosis (L. PIERRAT)

**Closing of Day 1 and Informations** 

19:00 **Diner at CAFFEFORTE** 

Tramway B – stop at "Notre-Dame Musée" station

### Wednesday, October 17th

**09:00** Registration/Breakfast

**09:30** Introduction to GIMELEC – P. TAILHADES (to be confirm)

#### **Session 4: STATISTICAL &** PROBABILISTIC APPROACHES

9:45 Entropy-based method for health assessment of electrochemical devices

**10:15** Shading probabilities of PV modules in a partially shaded solar array: a probabilistic approach to availability calculation

**10:45** What kind of service for PV modules?

11:15 Coffee Break

#### Session 5: RAM & LIFE CYCLE MANAGEMENT

**11:45** Gestion d'un actif technique sur son cycle de vie :application au transformateur de puissance **12:15** Methods of exchange between network operator and manufacturers to control dependability indices of new electrical equipment

12:45 Conclusion

H. MOREL - Chairman

13:00 Lunch

14:00 Closing