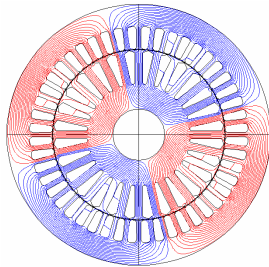


FLUX 10.3 2D Applications and Rotating Machines

applied magnetics

electromagnetic and thermal analysis software



Duration	3 days
Goal	FEM analysis of electric machines
Who should attend	FLUX 2D current and potential users
Language	English
Date	3, 4, 5 November 2009
Location	Grand-Rue 84, CH 1110 Morges
Organisation	applied magnetics
Contact	magnetics@bluewin.ch

General features of V10.3

Tuesday, 3 November 2009

- Environment
- Geometry, mesh generation and physical properties
- CAD import capabilities and automatic correction of defaults
- Mechanical sets in rotation and translation
- Symmetries and periodicities
- Sources description
- Automatic meshing (new!)
- Embedded circuit editor in FLUX (new!)
- Python control from geometry description to postprocessing (new!)
- 2D solver features in FLUX (new!)
- Sensors and I/O parameters
- Building scenarii for parametric studies (new!)
- Postprocessing features (curves visualisation, data file import, plots, animation, inductance, force and torque computation)
- Macros construction

Synchronous machine case study

Wednesday, 4 November 2009

- Model description
- Computation of cogging torque, inductances and back emf voltage
- Torque vs. load angle
- Sudden short-circuit analysis
- Iron losses computation (Bertotti, LS method)
- Closed loop control
- Computation of synchronous, transient and subtransient inductances in the direct and transverse axis
- Converter supply
- Synchronous machine overlay

Induction machine case study

Thursday, 5 November 2009

- Model description
- Squirrel cage and wound rotor types
- AC computation of the machine behavior vs. slip
- Equivalent circuit parameters extraction
- Start-up and transient operation (load torque variation)
- Converter supply
- Airgap forces due to a rotor eccentricity
- Induction machine overlay

REGISTRATION FORM FOR A TRAINING COURSE

To be sent to **applied magnetics** – Grand-Rue 84, – CH 1110 Morges
Fax : +41 21 803 58 78

Organization / department
 Name
 Address

 Tel Fax
 E-mail

FLUX 2D Applications course	Payment to	Fees / Participant Excluding 7.6% VAT in CHF
1. FLUX2D V10.3 Rotating Machines (3 days)	applied magnetics	1950.-

Dates of the course:	Amount excluding VAT :	1950.00
3, 4, 5 November 2009	+ VAT 7.6 % :	148.20
	Total amount to be paid:	2098.20

Payment

by included check to be paid to **Daho TAGHEZOUT**

or

by bank transfer on the account:

Daho Taghezout
F4-701,953.3

Bank relation: UBS SA
(SWIFT CODE **UBSWCHZH10A**, Clearing **243**, **IBAN** CH0200243243F47019533)

A confirmation will be sent to the participants soon after the payment of the course fees. In order to insure a maximum efficiency to the course, the number of participants is limited to 8. Please send us your registration as soon as possible if you wish to attend the training course.

Registration deadline : **October 23, 2009**

Registration fees include the lunch, coffee breaks and course documentation

Date et signature :

In case of a cancellation, registration fees can be fully recovered if notice is given at least one week before the starting date of the training course. The course will take place with a minimum of 4 registrations. Participants will be individually informed about the course organisation.