

Upgrade meeting

07/12/2018

- **Rosenblatt web sources:**

- <https://github.com/mscavnicky/copula-matlab>
- http://openturns.github.io/openturns/master/theory/numerical_methods/rosenblatt_transformation.html

- **Bibliography to study:**

- from Tiziano's paper: '*Adaptive Polynomial Chaos for Gas Turbine Compression System Performance Analysis*'

Equation 9 defines a random process as follow:

$$Y(\theta) = c_0 I_0 + \sum_{i_1=1}^{\infty} (c_{i_1} I_1(\xi_{i_1}(\theta))) + \sum_{i_1=1}^{\infty} \sum_{i_2=1}^{i_1} (c_{i_2} I_2(\xi_{i_1}(\theta), \xi_{i_2}(\theta))) + \dots \quad (1)$$