5.1 Time-domain modeling of wire antennas by method of moments

Quiz

Answer these questions to get feedback on how well you understand the course. Only one of the answers is correct. You don't have to answer every question. If you don't know the answer you can just leave it blank (default option: “I won't answer this question”) and this won't affect your score. Answering **correctly** will **add 2 points** to your score but on the other hand you'll **lose 1 point** if your answer is **wrong**. The questions are divided in groups of five questions.

Press **See result** after you have finished answering.

Displaying questions **1**..**5** of **5**:

Question 1

Time-domain modeling is praticularly suitable for...

Possible answers for question 1:

- … a narrowband analysis.
- … a wideband analysis.
- … an analysis which does not depend on the bandwidth.
- I won't answer this question

Question 2

By the method of moments and MOT (marching on-in-time) method the starting equation is "transformed" to a system of...

Possible answers for question 2:

- … an algebraic equations.
- … a delayed differential equations.
- … a difference equations.
- I won't answer this question

Question 3

The principle of MOT (marching on-in-time) method is...

Possible answers for question 3:

- … the unknonw (new) values of the currents at the current time are computed from the known (old) values of the currents in the previous time instants and this repeats until the whole response is computed.
- … the current response is computed by solving the large matrix equation in an instant.
- … the current response is approximated by a set of polynomials and unknown coefficients.
- I won't answer this question

Question 4

The length of the time step at the explicit approach...

Possible answers for question 4:

- … has to be smaller or eaqual to time, which the electromagnetic wave needs for the traveling the smallest distance between the centers of the discretization elements.
- … has to be larger than the time, which the electromagnetic wave needs for the traveling the smallest distance between the centers of the discretization elements.
- … can be chosen arbitrarily.
- I won't answer this question

Question 5

The implicit aproach is...

Possible answers for question 5:

- … stable than the explicit one.
- … less time consuming than the explicit one, and the inverse matrix do not have to be computed.
- … more accurate than the explicit one.
- I won't answer this question

see result