

PRESS RELEASE

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Fraunhofer HHI released new version of its open-source radio propagation model QuaDRiGa to be used in future 5G evaluations

At the beginning of August, Fraunhofer Heinrich Hertz Institute HHI released QuaDRiGa 2.0, which is a major update of its well-established open-source radio propagation model. QuaDRiGa, short for QUAsi Deterministic Radlo channel GenerAtor, is mainly used for generating realistic radio channel impulse responses for system-level simulations of mobile radio networks. These simulations are used to determine the performance of new technologies in order to provide an objective indicator for the standardization process in bodies like the third generation partnership program 3GPP.

QuaDRiGa was developed at Fraunhofer HHI to enable the modeling of MIMO radio channels for specific network configurations, such as indoor, satellite or heterogeneous configurations. Besides being a fully-fledged three dimensional geometry-based stochastic channel model, QuaDRiGa contains a collection of features created in SCM(e) and WINNER channel models along with novel modeling approaches which provide features to enable quasi-deterministic multi-link tracking of users (receiver) movements in changing environments.

The new version of QuaDRiGa contains a couple of new features and is further calibrated against 3GPP channel models like 3GPP-3D and the latest New Radio channel model. The open-source MATLAB/Octave implementation is freely available at <http://quadriga-channel-model.de>.

Innovations for the digital society of the future are the focus of research and development work at the **Fraunhofer Heinrich Hertz Institute HHI**. In this area, Fraunhofer HHI is a world leader in the development for mobile and optical communication networks and systems as well as processing and coding of video signals. Together with international partners from research and industry, Fraunhofer HHI works in the whole spectrum of digital infrastructure – from fundamental research to the development of prototypes and solutions. www.hhi.fraunhofer.de

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