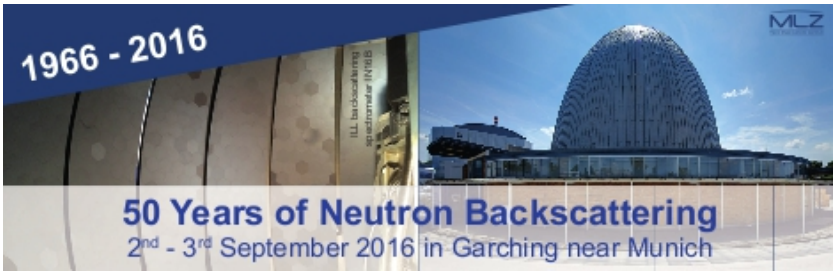


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# QENS Studies of conjugated polymer MEH-PPV

*Saturday, 3 September 2016 11:35 (15 minutes)*

MEH-PPV (poly[2-methoxy-5-(2_-ethylhexyloxy)-1,4-phenylenevinylene] is one of the most common conjugated polymers which continues to be of high interest in the area of polymer-based solar cells research, because of its good thermo-mechanical properties, stability, ease of processing, low-costs etc… We present recent quasi-elastic neutron scattering measurements of this electroluminescent active model system, which document the temperature evolution of the polymer dynamics. The data reveals a highly anharmonic side chain dynamics, which can be described by a stretched exponential function. The possible effects of this non-Debye dynamical behavior on the materials properties will be discussed.

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**Session Classification:** Recent science from Backscattering – Contributed talks