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Subject: Dissertation Denis Anikiev

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To whom it may concern,

Review on the dissertation of Denis Anikiev with the title 'Joint Detection, Location and Source Mechanism Determination of Microseismic Events'.

Denis Anikiev presents in his dissertation a method to locate microseismic events and also to obtain the respective source radiation pattern. The latter is of importance since it makes the recorded amplitudes depend on direction. Since the method is based on stacking it requires that it also can account for events with low amplitude due to the directivity of the source.

The dissertation has a systematic structure. After an introductory part the method is exposed where the general principles of diffraction stacking for location are discussed. Further, source mechanisms are introduced as a means to perform amplitude corrections. Denis Anikiev then presents applications of his method to field measurements and finally presents his conclusions.

This dissertation shows that Denis Anikiev is qualified as a Ph.D.

Sincerely,

Dr. Ekkehart Tessmer