## On quantum corrections in strong background fields

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The common wisdom is that quantum corrections in strong background fields do not drastically affect the spectrum of the radiation, which is due to the background fields. At the same time it is a well known fact in condenced matter theory that in non-stationary situations quantum corrections can be strong. During my talk I will show that in the well known situations of the Schwinger pair production, Hawking effect and de Sitter space QFT quantum corrections are also can be strong.