Visual investigation of possible degradation in GEM foil under test

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- During the long-term study of a Single Mask triple GEM chamber, the 3rd GEM foil of the chamber is found to be damaged
- The measured resistance is found to be ~ 40 kΩ
- Optical inspection of the GEM foil reveal imperfections in the GEM foil
- The short paths in the GEM foil are removed by using an ultrasonic (~ 20 kHz) bath with millipore water
  - → The foil is kept in the ultrasonic bath for ~ 5 minutes
  - → The foil is dried for ~ 30 minutes under continuous heat flow and after that the resistance of the foil was found to be high
- The leakage current of the GEM foil is measured and found to be reasonable (at ΔV ~ 300 V, RH ~ 50%; ~ 0.3 nA)