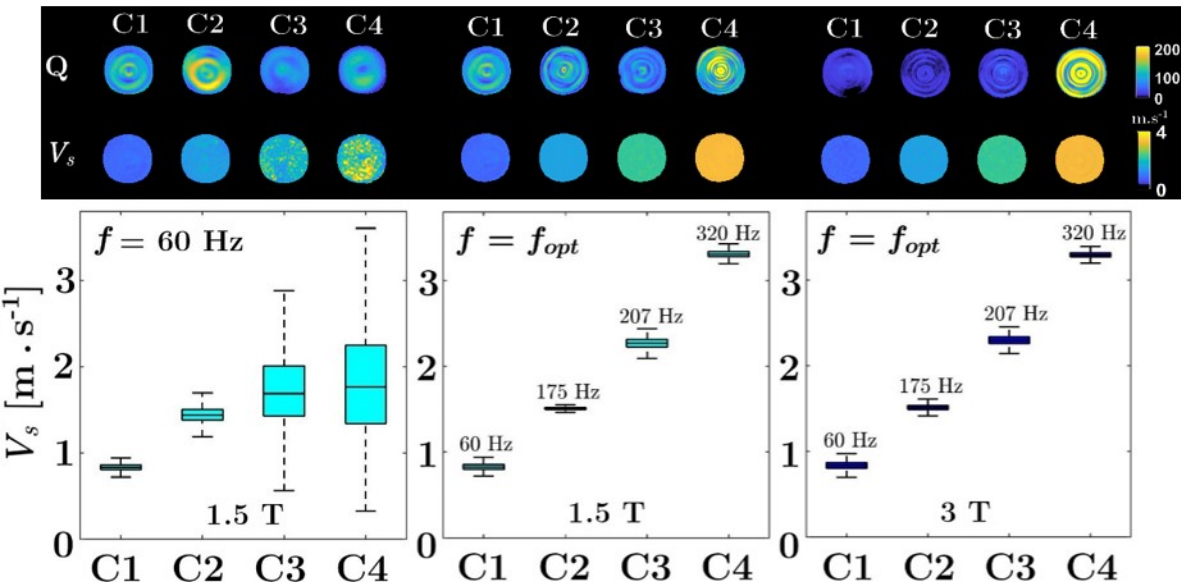


# Multi-frequency MRE for elasticity quantitation and optimal tissue discrimination: a two-platform liver fibrosis mimicking phantom study

Andoh F., Yue J.L., Julea F., Tardieu M., Noûs C., Page G., Garteiser P., Van Beers B.E., Maître X., Pellot-Barakat C.



Elastic homogeneous phantoms (C1-C4) of increasing elasticities were mechanically characterized at excitation frequencies  $f$  by MRE at 1.5 T and 3 T.

At conventional  $f = 60\text{Hz}$ , estimated shear velocities  $V_s$  were highly dispersed leading to overlapping phantom measurements.

At  $f = f_{opt}$  (leading to optimal shear wave spatial sampling), measurements were both precise and accurate and phantoms were easily discriminated.

The quality of acquired data  $Q$  was higher at 1.5 T than at 3 T, but  $V_s$  were consistent for both magnetic fields.