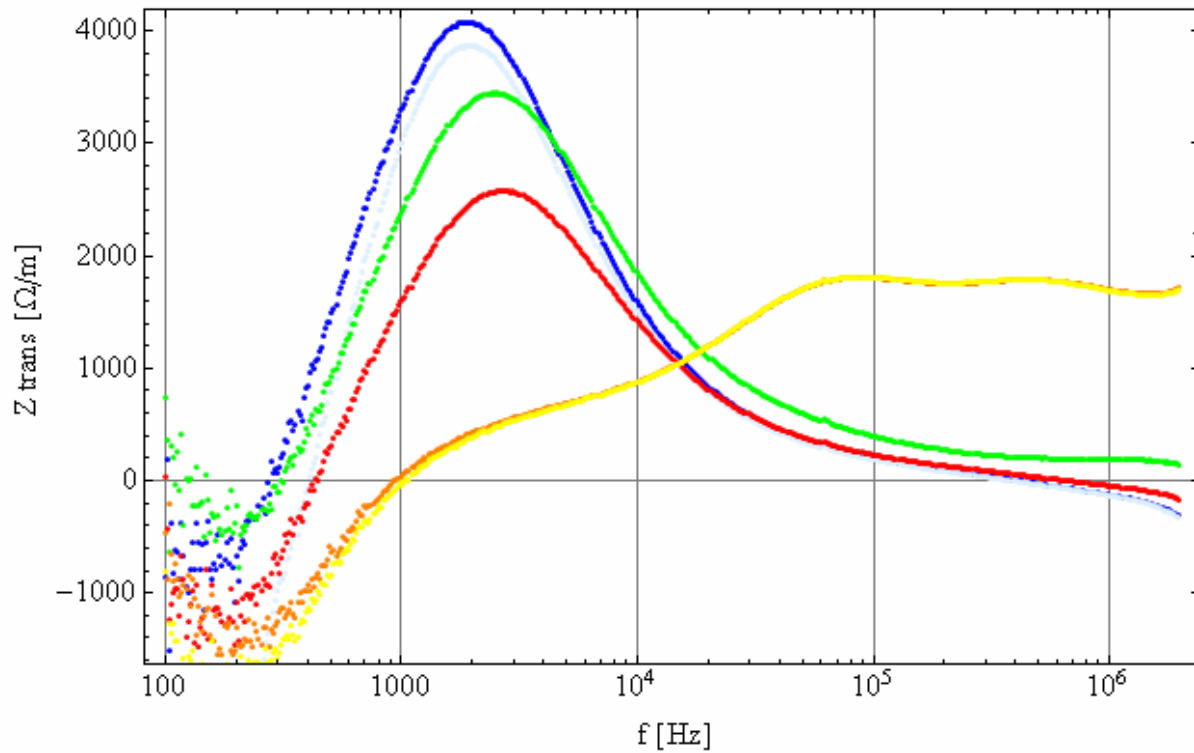


**Feb 12, 2008: Measurement of the transverse impedance of a PIM with a coil and the LCRmeter**

(N=14 turns, width = 1.6 cm). Plot of the difference between the impedance of the PIM and a reference copper tube (5.1 cm diameter, 1 mm thick)



**Red** : PIM closed (nominal value = 16.5 cm)

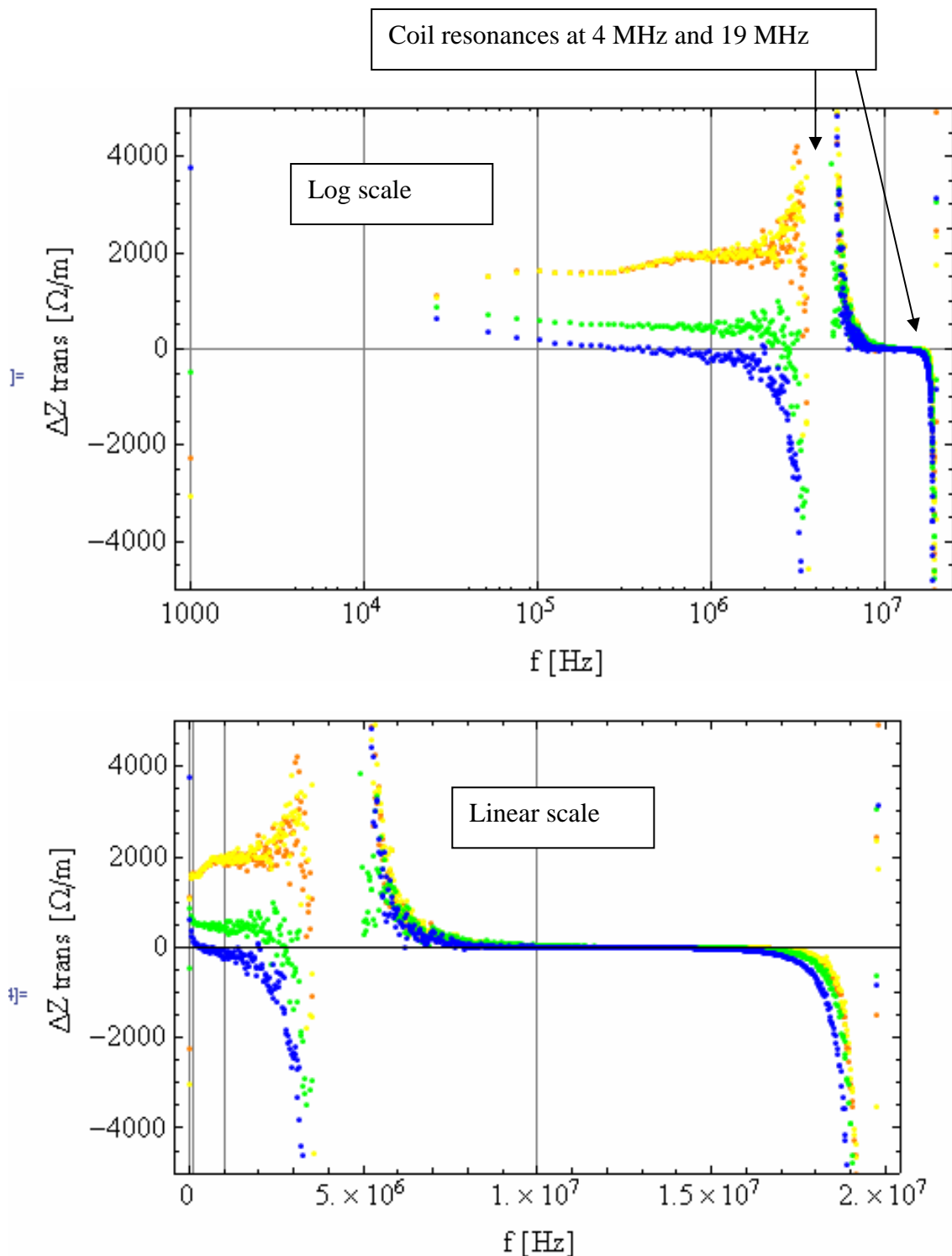
**Blue and Light Blue** : PIM open (nominal value = 19.9 cm)

**Green** : PIM open (nominal value = 19.9 cm) with 8 consecutive fingers isolated from the inner tube of the PIM (out of a total of 30 fingers).

**Orange and Yellow** : PIM open (nominal value = 19.9 cm) with all fingers (30) isolated from the inner tube of the PIM (out of a total of 30 fingers).

**Feb 14, 2008: Measurement of the transverse impedance of a PIM with a coil and the VNA**

(N=14 turns, width = 1.6 cm). Plot of the difference between the impedance of the PIM and a reference copper tube (5.1 cm diameter, 1 mm thick)



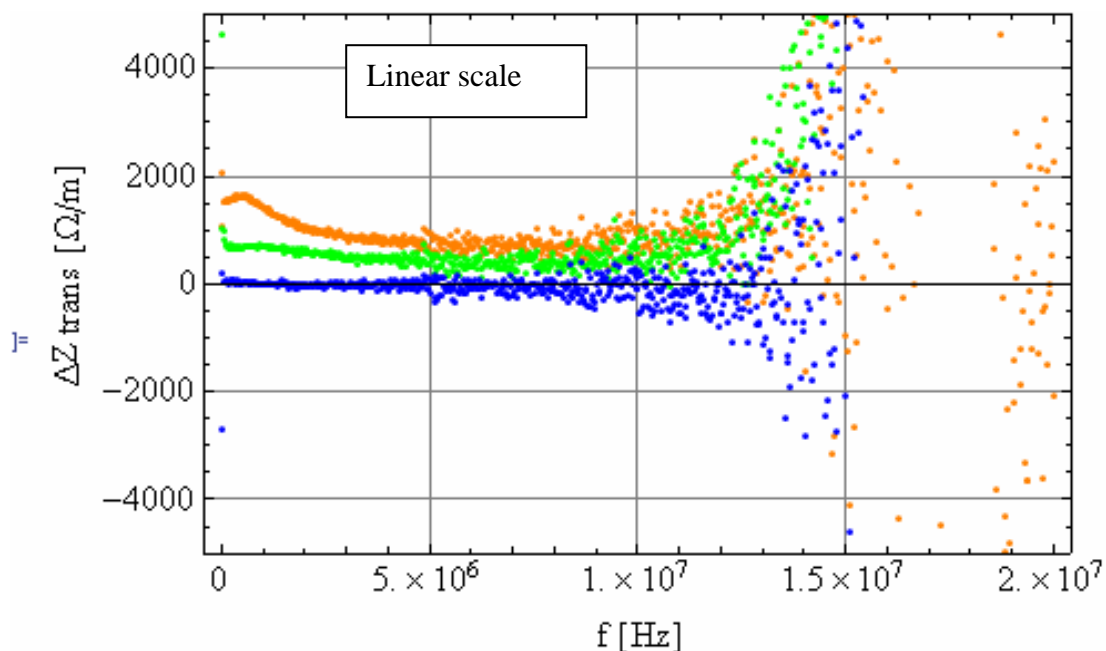
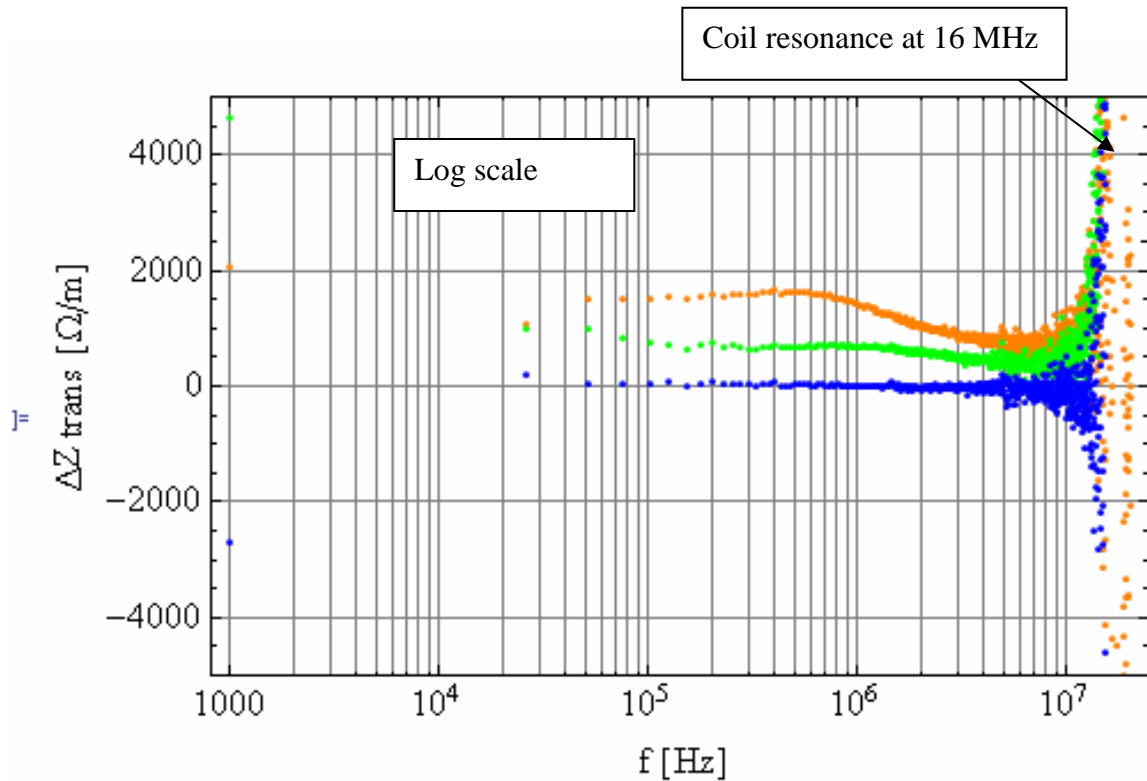
**Blue :** PIM open (nominal value = 19.9 cm)

**Green :** PIM open (nominal value = 19.9 cm) with **half** (15 consecutive /30) of the fingers isolated from the inner tube of the PIM (out of a total of 30 fingers).

**Orange and Yellow :** PIM open (nominal value = 19.9 cm) with all fingers (30) isolated from the inner tube of the PIM (out of a total of 30 fingers).

**Feb 14, 2008: Measurement of the transverse impedance of a PIM with a new coil and the VNA**

(N=5 turns, width = 1.6 cm). Plot of the difference between the impedance of the PIM and a reference copper tube (5.1 cm diameter, 1 mm thick)

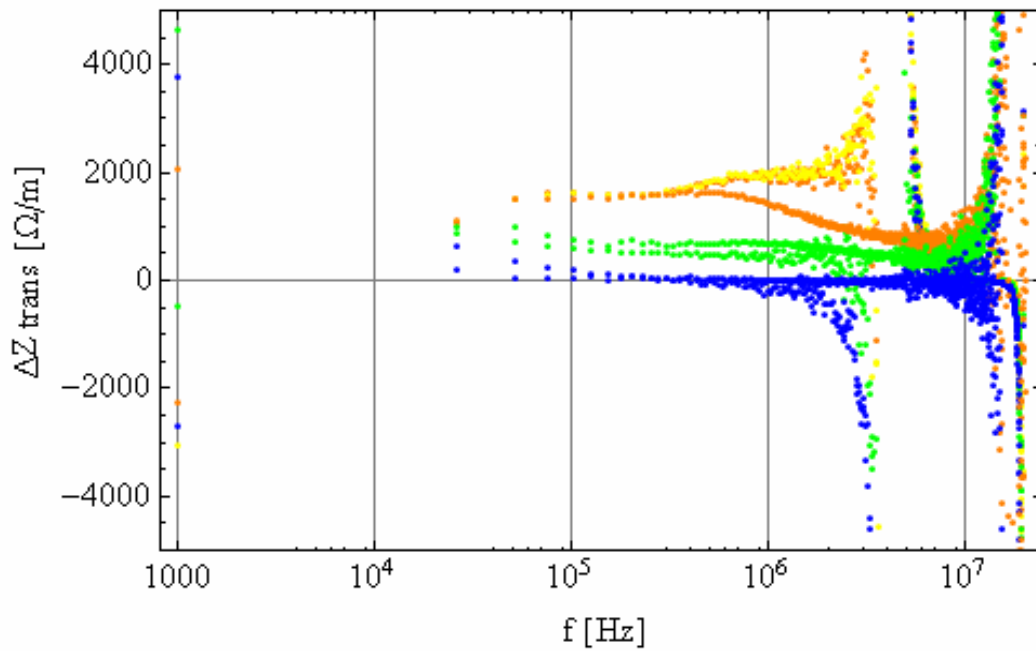


**Blue :** PIM open (nominal value = 19.9 cm)

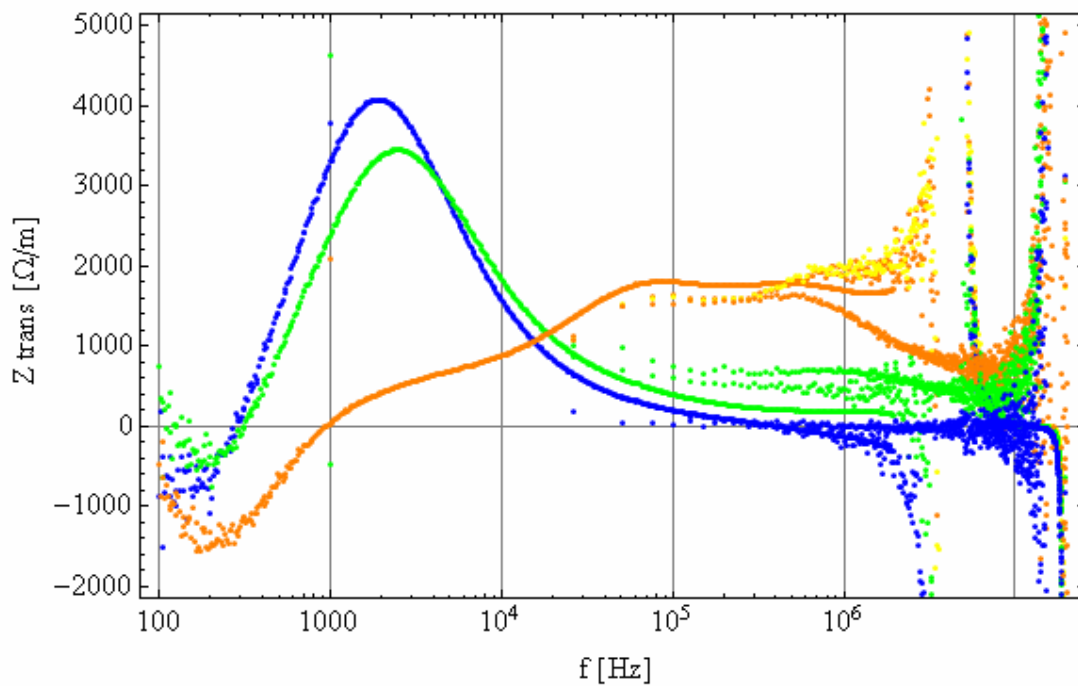
**Green :** PIM open (nominal value = 19.9 cm) with **half** (15 consecutive/30) of the fingers isolated from the inner tube of the PIM (out of a total of 30 fingers).

**Orange:** PIM open (nominal value = 19.9 cm) with all fingers (30) isolated from the inner tube of the PIM (out of a total of 30 fingers).

### Comparison between the two coils (measurements with VNA)



### Comparison between the two coils (measurements with LCRmeter and VNA)



**Blue:** PIM open (nominal value = 19.9 cm)

**Green :** PIM open (nominal value = 19.9 cm) with some fingers isolated from the inner tube of the PIM (out of a total of 30 fingers) -> 8 for the LCR, 15 for the VNA.

**Orange and Yellow :** PIM open (nominal value = 19.9 cm) with all fingers (30) isolated from the inner tube of the PIM (out of a total of 30 fingers).