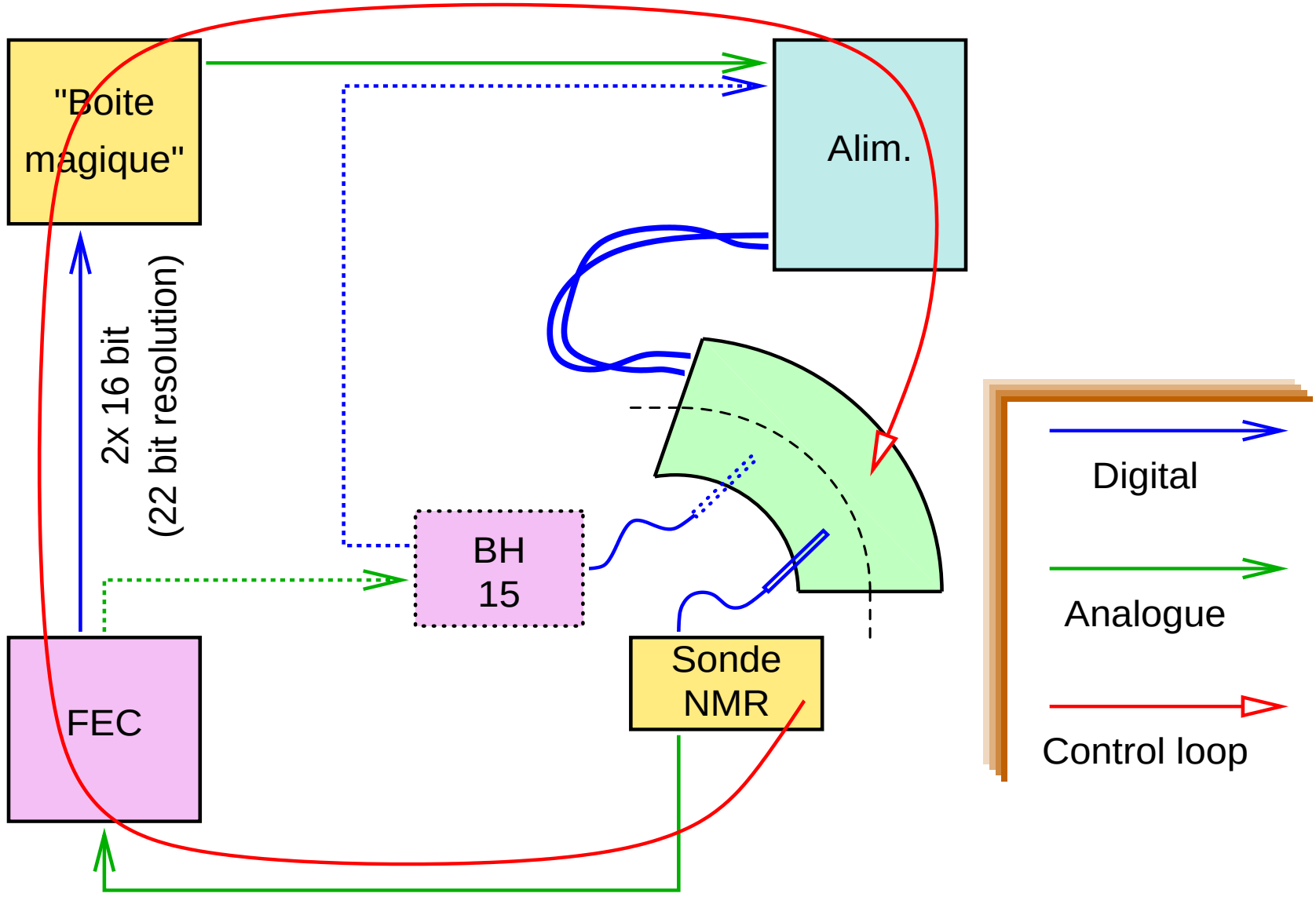HRS: NEW CONTROL LOOP