

Aug 23 Day shift

Name: Aug 23 Day shift

Authors: Nilesch Awari, Sergey Kovalev

Principal investigator (FWKP): Sergey Kovalev

Proposal number: 19201676

Start date: 2019-08-23 08:15:21 +0200

List of used frequencies [THz]: 0.5; 0.7

Frequency 1: 0.7

Default object type: EXPERIMENTAL_STEP_TELBE_LOG

Nilesch Awari: true

Sergey Kovalev: true

Continuing the temperature dependence for LSCO(x10) sample from 80 K and above

7:55 beam went off, operators are trying to get it back.

09:30 Changed the sample to doping of 10, LSCO (x = 10) and started to pump it down.

10:50 still no beam.

11:50 got the beam back,

Detailed description: full power BDA – 350mW

power with 1 filter – 150 mW, power with 2 filters – 95 mW

started the run at room temperature, saw THG signal

decided to cool the sample,

sample at 3.5K, start fluence dependence here

Log entry overview (automatically generated):

Log for Filename

001_EOS_2x500GHz_cross_polarization_S8_gain_20_WGm90

- Start date: 2019-08-23 21:02:07 +0200
- End date: 2019-08-23 21:07:28 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 51.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1

- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 300 K T2 - 296.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename

002_EOS_2x500GHz_cross_polarization_S8_gain_10_WGm90

- Start date: 2019-08-23 21:16:21 +0200
- End date: 2019-08-23 21:21:42 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 54.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 300 K T2 - 296.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename

003_EOS_2x500GHz_cross_polarization_S8_gain_10_WGm90_no_sample

- Start date: 2019-08-23 21:24:02 +0200
- End date: 2019-08-23 21:29:22 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 54.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 300 K T2 - 296.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename

004_EOS_2x500GHz_cross_polarization_no_sample_gain_100

- Start date: 2019-08-23 22:51:44 +0200
- End date: 2019-08-23 22:52:37 +0200
- Power BDA [mW]: 58.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.5
- THz polarizer angle [deg]: 0.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0

- AI2 3 switch: true
- Stage 1 start position [mm]: 54.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 2
- Notes: ZnTe 2 mm gain 10 after 2x500 GHz filters First polarizer at 180 degs - vertical After the sample - polarizer 90 degs BDA power 58mW - after both filters WG -0 degs

Log for Filename

005_EOS_2x500GHz_cross_polarization_no_sample_gain_100

- Start date: 2019-08-23 22:58:06 +0200
- End date: 2019-08-23 23:08:48 +0200
- Power BDA [mW]: 58.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.5
- THz polarizer angle [deg]: 0.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 54.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 2
- Notes: ZnTe 2 mm gain 10 after 2x500 GHz filters First polarizer at 0 degs - vertical transmission BDA power 58mW - after both filters After the sample - polarizer at 90 degs and 1000GHz filter WG -0 degs

Log for Filename

006_EOS_2x500GHz_cross_polarization_A1_sample_gain_100

- Start date: 2019-08-23 23:34:12 +0200
- End date: 2019-08-23 23:44:49 +0200
- Power BDA [mW]: 58.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.5
- THz filter used?: true
- THz polarizer angle [deg]: 0.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 54.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 2
- Notes: ZnTe 2 mm gain 10 after 2x500 GHz filters First polarizer at 0 degs - vertical transmission BDA power 58mW - after both filters After the sample - polarizer at 90 degs and 1000GHz filter WG -0 degs

Log for Filename

007_EOS_2x500GHz_cross_polarization_A1_sample_gain_100

- Start date: 2019-08-23 23:59:46 +0200
- Power BDA [mW]: 58.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.5
- THz filter used?: true
- THz polarizer angle [deg]: 0.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0

- AI2 3 switch: true
- Stage 1 start position [mm]: 54.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 2
- Notes: ZnTe 2 mm gain 10 after 2x500 GHz filters First polarizer at 0 degs - vertical transmission BDA power 57mW - after both filters After the sample - polarizer at 90 degs and 1000GHz filter WG -0 degs

Log for Filename **160_LSCOx45_T1_3p5K_T2_21K_WGm90degs**

- Start date: 2019-08-23 12:24:33 +0200
- End date: 2019-08-23 12:24:39 +0200
- Power BDA [mW]: 95.0
- Sample temperature [K]: 3.5
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 90.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 1
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 3.5 K T2 - 20 K BDA power 95mW - after both filters Fluence dependance WG -90 degs

Log for Filename **161_LSCOx45_T1_3p5K_T2_20K_WGm90degs**

- Start date: 2019-08-23 12:25:13 +0200
- End date: 2019-08-23 12:31:26 +0200
- Power BDA [mW]: 95.0
- Sample temperature [K]: 3.5
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 90.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 3.5 K T2 - 20 K BDA power 95mW - after both filters Fluence dependance WG -90 degs

Log for Filename **162_LSCOx45_T1_3p5K_T2_20K_WGm75degs**

- Start date: 2019-08-23 12:33:18 +0200
- End date: 2019-08-23 12:38:36 +0200
- Power BDA [mW]: 95.0
- Sample temperature [K]: 3.5
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 90.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0

- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 3.5 K T2 - 20 K BDA power 95mW - after both filters Fluence dependance WG -75 degs

Log for Filename **163_LSCOx45_T1_3p5K_T2_20K_WGm60degs**

- Start date: 2019-08-23 12:40:15 +0200
- End date: 2019-08-23 12:45:34 +0200
- Power BDA [mW]: 95.0
- Sample temperature [K]: 3.5
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 3.5 K T2 - 20 K BDA power 95mW - after both filters Fluence dependance WG -65 degs

Log for Filename **164_LSCOx45_T1_3p4K_T2_20K_WGm50degs**

- Start date: 2019-08-23 12:48:13 +0200
- End date: 2019-08-23 12:53:34 +0200
- Power BDA [mW]: 95.0
- Sample temperature [K]: 3.4
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 3.4 K T2 - 20 K BDA power 95mW - after both filters Fluence dependance WG -65 degs

Log for Filename **164_LSCOx45_T1_3p4K_T2_19p5K_WGm45degs**

- Start date: 2019-08-23 12:56:17 +0200
- End date: 2019-08-23 13:01:37 +0200
- Power BDA [mW]: 95.0
- Sample temperature [K]: 3.4
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 45.0

- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 3.4 K T2 - 19.5 K BDA power 95mW - after both filters Fluence dependance WG -45 degs

Log for Filename **166_LSCOx45_T1_3p4K_T2_19p5K_WGm60degs**

- Start date: 2019-08-23 13:32:48 +0200
- End date: 2019-08-23 13:38:09 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 3.4
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 3.4 K T2 - 19.5 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **167_LSCOx45_T1_4p35K_T2_19p6K_WGm60degs**

- Start date: 2019-08-23 13:42:08 +0200
- End date: 2019-08-23 13:47:25 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 4.35
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 4.35 K T2 - 19.6 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **168_LSCOx45_T1_7p5K_T2_21K_WGm60degs**

- Start date: 2019-08-23 13:58:47 +0200
- End date: 2019-08-23 14:04:08 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 7.5

- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 7.5 K T2 - 21 K BDA power 95mW - after both filters Temperature dependance WG -60 degs temperature is between 6K and 9K

Log for Filename **169_LSCOx45_T1_10K_T2_21p5K_WGm60degs**

- Start date: 2019-08-23 14:09:20 +0200
- End date: 2019-08-23 14:14:41 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 10.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 10 K T2 - 21p5 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **170_LSCOx45_T1_12K_T2_22p1K_WGm60degs**

- Start date: 2019-08-23 14:19:09 +0200
- End date: 2019-08-23 14:24:28 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 10.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 12 K T2 - 22p1 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **171_LSCOx45_T1_15K_T2_24K_WGm60degs**

- Start date: 2019-08-23 14:28:11 +0200

- End date: 2019-08-23 14:33:30 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 15.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 15 K T2 - 24 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **172_LSCOx45_T1_20K_T2_27K_WGm60degs**

- Start date: 2019-08-23 14:37:54 +0200
- End date: 2019-08-23 14:43:16 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 20.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 20 K T2 - 27 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **173_LSCOx45_T1_25K_T2_32K_WGm60degs**

- Start date: 2019-08-23 14:46:00 +0200
- End date: 2019-08-23 14:51:19 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 25.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 25 K T2 - 32 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **174_LSCOx45_T1_30K_T2_36p9K_WGm60degs**

- Start date: 2019-08-23 15:00:31 +0200
- End date: 2019-08-23 15:05:51 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 30.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 30 K T2 - 36.9 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **175_LSCOx45_T1_40K_T2_46p5K_WGm60degs**

- Start date: 2019-08-23 15:10:30 +0200
- End date: 2019-08-23 15:15:52 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 40.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 40 K T2 - 46.5 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **176_LSCOx45_T1_50K_T2_55p8K_WGm60degs**

- Start date: 2019-08-23 15:19:08 +0200
- End date: 2019-08-23 15:24:29 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 50.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of

ZnTe crystal - wrong for the whole night shift T1 - 50 K T2 - 55p8 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **177_LSCOx45_T1_60K_T2_65p3K_WGm60degs**

- Start date: 2019-08-23 15:27:24 +0200
- End date: 2019-08-23 15:32:47 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 60.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 60 K T2 - 65.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **178_LSCOx45_T1_80K_T2_81p3K_WGm60degs**

- Start date: 2019-08-23 15:35:59 +0200
- End date: 2019-08-23 15:41:19 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 80.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 80 K T2 - 81.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **179_LSCOx45_T1_100K_T2_102K_WGm60degs**

- Start date: 2019-08-23 15:45:26 +0200
- End date: 2019-08-23 15:50:47 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 100.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1

- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 100 K T2 - 102 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **180_LSCOx45_T1_150K_T2_148p6K_WGm60degs**

- Start date: 2019-08-23 15:56:48 +0200
- End date: 2019-08-23 16:02:08 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 150.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 150 K T2 - 148.6 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **181_LSCOx45_T1_200K_T2_202K_WGm60degs**

- Start date: 2019-08-23 16:07:13 +0200
- End date: 2019-08-23 16:12:39 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 200.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 200 K T2 - 202 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **182_LSCOx45_T1_250K_T2_250K_WGm60degs**

- Start date: 2019-08-23 16:18:20 +0200
- End date: 2019-08-23 16:23:40 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 250.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80

- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 250 K T2 - 250 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **183_LSCOx45_T1_300K_T2_297p3K_WGm60degs**

- Start date: 2019-08-23 16:27:43 +0200
- End date: 2019-08-23 16:33:02 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 300 K T2 - 297.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **184_LSCOx45_T1_320K_T2_319p2K_WGm60degs**

- Start date: 2019-08-23 16:38:48 +0200
- End date: 2019-08-23 16:44:07 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 320.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 320 K T2 - 319.2 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **185_LSCOx45_T1_330K_T2_329p3K_WGm60degs**

- Start date: 2019-08-23 16:48:59 +0200
- End date: 2019-08-23 16:54:17 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 330.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true

- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 330 K T2 - 329.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **186_LSCOx45_T1_350K_T2_329p3K_WGm60degs**

- Start date: 2019-08-23 17:01:22 +0200
- End date: 2019-08-23 17:06:43 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 330.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 60.0
- Stage 1 number of steps: 80
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 350K T2 - 350 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename

186_LSCOx45_T1_350K_T2_329p3K_WGm60degs_no_sample

- Start date: 2019-08-23 17:09:30 +0200
- End date: 2019-08-23 17:16:02 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 330.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 65.0
- Stage 1 number of steps: 120
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 350K T2 - 350 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **186_LSCOx45_T1_TPOP_while_cooling**

- Start date: 2019-08-23 17:33:45 +0200
- End date: 2019-08-23 17:41:44 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 330.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0

- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 70.0
- Stage 1 number of steps: 120
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 350K T2 - 350 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **186_LSCOx45_T1_TPOP_while_cooling**

- Start date: 2019-08-23 17:51:20 +0200
- End date: 2019-08-23 17:59:20 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 330.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 70.0
- Stage 1 number of steps: 120
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 350K T2 - 350 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **187_LSCOx45_T5K_TPOP**

- Start date: 2019-08-23 18:08:51 +0200
- End date: 2019-08-23 18:16:55 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 330.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 65.0
- Stage 1 number of steps: 120
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 350K T2 - 350 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **188_LSCOx45_T300K_TPOP**

- Start date: 2019-08-23 18:24:52 +0200
- End date: 2019-08-23 18:29:10 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 300.0

- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 65.0
- Stage 1 number of steps: 120
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 300 K T2 - 296.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Log for Filename **189_LSCOx45_T300K_TPOP**

- Start date: 2019-08-23 18:29:16 +0200
- End date: 2019-08-23 18:37:18 +0200
- Power BDA [mW]: 65.0
- Sample temperature [K]: 300.0
- THz frequency [THz]: 0.7
- THz polarizer angle [deg]: 60.0
- AI1 0 max: 1.0
- AI1 0 min: -1.0
- AI2 3 switch: true
- Stage 1 start position [mm]: 65.0
- Stage 1 number of steps: 120
- Stage 1 step size [mm]: -0.1
- Number of loops (TELBE): 1
- Notes: ZnTe 2 mm gain 100 after 2x700 GHz filters Polarization dependance QWP @ 45 degs First polarizer at 180 degs - vertical After the sample - polarizer @ 45 degs - fixed LSCO 10 Added WG polarizer with vertical transmission infront of ZnTe crystal - wrong for the whole night shift T1 - 300 K T2 - 296.3 K BDA power 95mW - after both filters Temperature dependance WG -60 degs

Children:

EXPERIMENTAL_STEP_TELBE_LOG: EXP_TELBE_LOG-
 688(160_LSCOx45_T1_3p5K_T2_21K_WGm90degs), EXP_TELBE_LOG-
 689(161_LSCOx45_T1_3p5K_T2_20K_WGm90degs), EXP_TELBE_LOG-
 690(162_LSCOx45_T1_3p5K_T2_20K_WGm75degs), EXP_TELBE_LOG-
 691(163_LSCOx45_T1_3p5K_T2_20K_WGm60degs), EXP_TELBE_LOG-
 692(164_LSCOx45_T1_3p4K_T2_20K_WGm50degs), EXP_TELBE_LOG-
 693(164_LSCOx45_T1_3p4K_T2_19p5K_WGm45degs), EXP_TELBE_LOG-
 694(166_LSCOx45_T1_3p4K_T2_19p5K_WGm60degs), EXP_TELBE_LOG-
 695(167_LSCOx45_T1_4p35K_T2_19p6K_WGm60degs), EXP_TELBE_LOG-
 696(168_LSCOx45_T1_7p5K_T2_21K_WGm60degs), EXP_TELBE_LOG-
 697(169_LSCOx45_T1_10K_T2_21p5K_WGm60degs), EXP_TELBE_LOG-
 698(170_LSCOx45_T1_12K_T2_22p1K_WGm60degs), EXP_TELBE_LOG-
 699(171_LSCOx45_T1_15K_T2_24K_WGm60degs), EXP_TELBE_LOG-
 700(172_LSCOx45_T1_20K_T2_27K_WGm60degs), EXP_TELBE_LOG-
 701(173_LSCOx45_T1_25K_T2_32K_WGm60degs), EXP_TELBE_LOG-
 702(174_LSCOx45_T1_30K_T2_36p9K_WGm60degs), EXP_TELBE_LOG-
 703(175_LSCOx45_T1_40K_T2_46p5K_WGm60degs), EXP_TELBE_LOG-
 704(176_LSCOx45_T1_50K_T2_55p8K_WGm60degs), EXP_TELBE_LOG-
 705(177_LSCOx45_T1_60K_T2_65p3K_WGm60degs), EXP_TELBE_LOG-
 706(178_LSCOx45_T1_80K_T2_81p3K_WGm60degs), EXP_TELBE_LOG-
 707(179_LSCOx45_T1_100K_T2_102K_WGm60degs), EXP_TELBE_LOG-
 708(180_LSCOx45_T1_150K_T2_148p6K_WGm60degs), EXP_TELBE_LOG-
 709(181_LSCOx45_T1_200K_T2_202K_WGm60degs), EXP_TELBE_LOG-

710(182_LSC0x45_T1_250K_T2_250K_WGm60degs), EXP_TELBE_LOG-
 711(183_LSC0x45_T1_300K_T2_297p3K_WGm60degs), EXP_TELBE_LOG-
 712(184_LSC0x45_T1_320K_T2_319p2K_WGm60degs), EXP_TELBE_LOG-
 713(185_LSC0x45_T1_330K_T2_329p3K_WGm60degs), EXP_TELBE_LOG-
 714(186_LSC0x45_T1_350K_T2_329p3K_WGm60degs), EXP_TELBE_LOG-
 715(186_LSC0x45_T1_350K_T2_329p3K_WGm60degs_no_sample),
 EXP_TELBE_LOG-716(186_LSC0x45_T1_TPOP_while_cooling), EXP_TELBE_LOG-
 717(186_LSC0x45_T1_TPOP_while_cooling), EXP_TELBE_LOG-
 718(187_LSC0x45_T5K_TPOP), EXP_TELBE_LOG-
 719(188_LSC0x45_T300K_TPOP), EXP_TELBE_LOG-
 720(189_LSC0x45_T300K_TPOP), EXP_TELBE_LOG-
 721(001_EOS_2x500GHz_cross_polarization_S8_gain_20_WGm90),
 EXP_TELBE_LOG-
 722(002_EOS_2x500GHz_cross_polarization_S8_gain_10_WGm90),
 EXP_TELBE_LOG-
 723(003_EOS_2x500GHz_cross_polarization_S8_gain_10_WGm90_no_sample),
 EXP_TELBE_LOG-
 724(004_EOS_2x500GHz_cross_polarization_no_sample_gain_100),
 EXP_TELBE_LOG-
 725(005_EOS_2x500GHz_cross_polarization_no_sample_gain_100),
 EXP_TELBE_LOG-
 726(006_EOS_2x500GHz_cross_polarization_A1_sample_gain_100),
 EXP_TELBE_LOG-
 727(007_EOS_2x500GHz_cross_polarization_A1_sample_gain_100)

Modification
Date:

Fri Jan 10 2020 16:23:15 GMT+0100 (Central European Standard Time)

Registration
Date:

Fri Aug 23 2019 08:24:03 GMT+0200 (Central European Summer Time)