

What is the LoLa system?

Software

```
fcomplex return c;
fcomplex csqrt(fcomplex z)
fcomplex RCmul(float x, fcomplex a)
fcomplex c;
float w;
if ((z.r == 0.0) && (z.i == 0.0)) {
    c.r=0.0;
    c.i=0.0;
} else {
    w = sqrt((sqrt(z.r*z.r + z.i*z.i)));
    if (z.r >= 0.0) {
        c.r=w;
        c.i=z.i/(2.0*w);
    } else {
        c.r=w;
        c.i=-z.i/(2.0*w);
    }
}
return c;
fcomplex Cinv(fcomplex z)
fcomplex c;
float s = 1.0 / sqrt(z.r*z.r + z.i*z.i);
c.r = z.r*s;
c.i = -z.i*s;
return c;
```

<http://lola.conts.it>

Hardware



Network



LoLa main features

- Full HD video (can do more) up to 90 frames per second
- Up to 4 cameras per site
- Up to 3 sites together
- 10 audio channels at 44.1 or 48 Khz
- Internal latency less than 5 milliseconds (plus network)
- Distance more than 3500 Km (academic networks)
- Real time recording
- Interactive chat
- Internal monitoring tools
- ...

LoLa main requirements

- **A good hardware (gaming PC with specific components)**
- **Specific High Speed cameras (robotic vision)**
- **Symmetric (upload – download) network, at least 100Mbps**
- **Low Latency network**
- **Guaranteed bandwidth along the path**

LoLa @institution ?

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More info

<http://www.swing-project.eu>

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<https://lola.conts.it>

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