

# A sample Sweave demo

Author name

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> n <- 1000
> x <- rnorm(n, mean=2)
> y <- 1.5 + 0.4*x + rnorm(n)
> df <- data.frame(x=x, y=y)
> # take a bootstrap sample
> df <- df[sample(nrow(df), nrow(df), rep=TRUE),]
> xc <- with(df, xyTable(x, y))
> df2 <- cbind.data.frame(x=xc$x, y=xc$y, n=xc$number)
> df.ell <- as.data.frame(with(df, ellipse(cor(x, y),
+                                         scale=c(sd(x),sd(y)),
+                                         centre=c(mean(x),mean(y))))))
> p1 <- ggplot(data=df2, aes(x=x, y=y)) +
+   geom_point(aes(size=n), alpha=.6) +
+   stat_smooth(data=df, method="loess", se=FALSE, color="green") +
+   stat_smooth(data=df, method="lm") +
+   geom_path(data=df.ell, colour="green", size=1.2)
> print(p1)
```

Figure: Here goes the caption.