My title

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Contents

1 Very simple demo

1.1 UTF8 support + escape math equation

Note that UTF8 is supported (the α variable) :

```
# Generate a matrix a_{i,j} = 𝒰([0,1[)
α=rand(4,5)
```

1.2 Long lines are wrapped

```
function ⊗(a::AbstractArray{T},b::AbstractArray{S}) where {T<:Number,S<:Number}
↪  kron(a,b) end;

β=rand(2,5);
γ = α ⊗ β
```

```
8×25 Array{Float64,2}:
 0.441551  0.215337  0.426676   0.00846026  …  0.788152   0.0156277   0.493394
 0.209866  0.168023  0.0863321  0.339892       0.159472   0.627846    0.0462156
 0.912372  0.444948  0.881635   0.0174813      0.477811   0.00947418  0.299116
```

```
0.433643  0.347184  0.178387  0.702315       0.0966786  0.380626   0.0280178
0.460432  0.224545  0.444921  0.00882202     0.653106   0.01295    0.408853
0.21884   0.175208  0.0900238 0.354426    …  0.132147   0.520267   0.0382967
0.663026  0.323347  0.640689  0.0127038      0.758835   0.0150464  0.475041
0.315131  0.252301  0.129635  0.510376       0.15354    0.604492   0.0444965
```

1.3 Plot example

You can easily generate plots, one example from Plots Julia package, is used to generate Figure 1.

```
θ = linspace(0,1.5π,100)
r = abs(0.1 * randn(100) + sin.(3θ))
plot(θ,r,proj=:polar,m=2)
```

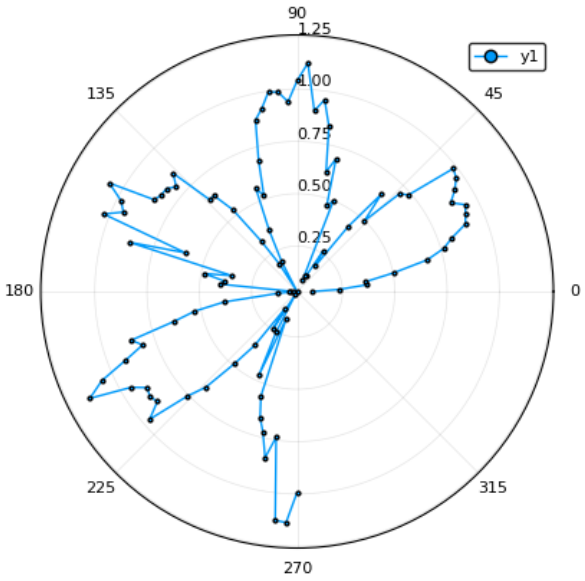

Figure 1: A polar plot.

1.4 Org with bibliography

$$\frac{d}{dt}\iint_{\Sigma(t)} \mathbf{F}(\mathbf{r},t)\cdot d\mathbf{A} = \iint_{\Sigma(t)} \left(\mathbf{F}_t(\mathbf{r},t) + \left[\nabla\cdot\mathbf{F}(\mathbf{r},t)\right]\mathbf{v}\right)\cdot d\mathbf{A} - \oint_{\partial\Sigma(t)} \left[\mathbf{v}\times\mathbf{F}(\mathbf{r},t)\right]\cdot d\mathbf{s} \tag{1}$$

Eq. 1 is demonstrated in [1].

References

[1] Harley Flanders. "Differentiation Under the Integral Sign". In: *The American Mathematical Monthly* 80.6 (June 1973), p. 615. DOI: 10.2307/2319163. URL: https://doi.org/10.2307/2319163.