

Writing Effective Titles

PHYSICAL REVIEW LETTERS

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A good title determines whether somebody invests the time to read your paper or come to your talk

Busy physicists employ three criteria

The information conveyed in the title

The reputation of the author

The abstract (*ut infra*)

Play fair; don't "trick" people into reading your paper by a misleading title

Waste of their time

Ruins your reputation (*ut supra*)

Daily (real) example:

<http://xxx.lanl.gov/list/hep-ph/recent>



Effective titles are *concise, descriptive, and interesting*

Restrict the title to a *maximum of 12 words* (makes it easier to remember)

Put key words *first*

Accurately reflect the content of the paper

Avoid unfamiliar acronyms or abbreviations

Worst title I have ever seen:

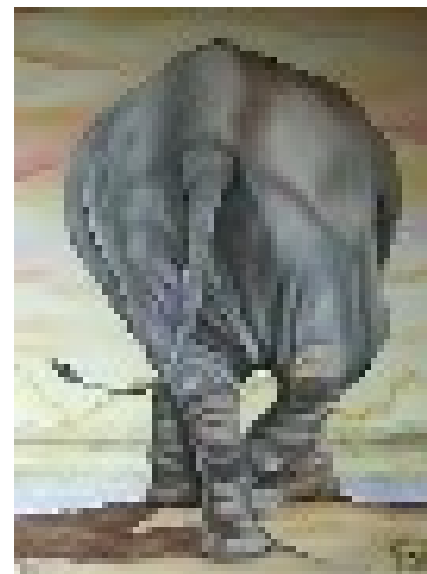
“Towards the Observation of Signal over Background in Future Experiments”



But not too interesting . . .

**Would you take seriously
a paper with the following title:**

**“Looking from the East at an
Elephant Trotting West:
Direct CP Violation in B^0 Decays”**



Honestly, I did not make this up;
see <http://arxiv.org/abs/hep-ph/0203157>.



Good titles are concise and memorable

Original Title

Laser-Induced Plasma
Phenomena near a
Solid Surface at the Incident
Intensity in the Range from
10 MW/cm² to 10 GW/cm²

Investigation of Threshold
Characteristics of Materials
Fracture Under Impact Loads
Produced by Pulsed Magnetic
Fields

Better Title

*Laser Plasma—Solid
Surface Interaction at
10 MW cm² to 10 GW cm²*

*Threshold Fractures
Produced by Pulsed
Magnetic Fields*

Second-worst title I have ever seen:

**“Report of the Subgroup on
Alternative Models and New Ideas”**



To capture the busy reader's attention, put keywords first

Original Title

Application of the time-dependent local density approximation to conjugated molecules

A novel approach to estimate the stability of one-dimensional quantum inverse scattering

Better Title

Time-dependent local density approximation for conjugated molecules

New stability estimate for 1D quantum inverse scattering

Advice from AIP: “Words that do not carry information, such as “The...”, “A...”, “On...”, “Investigation of...”, “Study of...”, should be omitted.



Excise throw-away introductory fluff

~~Observation of resonance condensation of fermionic atom pairs~~

~~Capabilities of parallel analyses of the structure of materials by field ion and scanning probe microscopy~~

~~Study of the ionic Peierls-Hubbard model using density matrix renormalization group methods~~

~~On the Electron-Electron Interactions in Two Dimensions~~

~~Theory of traveling filaments in bistable semiconductor structures~~



Perform colon surgery on run-on titles

Higgsless Electroweak Symmetry Breaking in Warped Backgrounds: Constraints and Signatures

Surface tension in a compressible liquid-drop model: Effects on nuclear density and neutron skin thickness

Strong Charge Fluctuations in the Single-Electron Box: A Quantum Monte Carlo Analysis

Magnetization plateaus for spin-one bosons in optical lattices: Stern-Gerlach experiments with strongly correlated atoms



Do not use words in the title that make qualitative statements about the work being reported

“precise”, “accurate”

“important”, “influential”

“innovative”, “unique”, “ground-breaking”, “brilliant”, “unprecedented”



Do not use the names of people, places, or coined words

The Phys. Rev. journals also proscribe the name of the accelerator or the type of detector used in paper titles

And they disdain “More about...”, “...revisited”, and dangling participles (“...using...”)



Avoid all but the most common* acronyms in the title

Original Title

One-dimensional SPH
method

Application of CVS
filtering to mixing in two-
dimensional homogeneous
turbulence

Better Title

*Smoothed-particle
hydrodynamics 1D method
for gas dynamics
applications*

*Coherent-vortex-
simulation filtering
applied to mixing in 2D
homogeneous turbulence*

Refer to the *AIP Style Manual



Capitalization? Follow the style of the journal to which the paper is submitted

Acta Crystallographica

Crystallography of a new metastable phase in Zr-N alloy

Nuclear Physics B

Five-loop ε expansion for $O(n) \times O(m)$ spin models

Physical Review Letters

Complexity of Small Silicon Self-Interstitial Defects

Physical Review B

Electronic excitations on silver surfaces

Science

Making Nanoscale Materials with Supercritical Fluids

