Sample document

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1　LLAlignAnd

$$\&= \quad \begin{aligned} a &= b \\ c &= d \end{aligned} \quad \text{ok}$$

$$=\& \quad \begin{aligned} a =&b \\ c =&d \end{aligned} \quad \text{ng}$$

$$=\{\}\& \quad \begin{aligned} a &= b \\ c &= d \end{aligned} \quad \text{ok}$$

2　LLAlignSingleLine

───── Long line before display (same result) ─────

Lorem ipsum.

$$f(x) = ax^2 + bx + c$$

This is an equation environment.

Lorem ipsum.

$$f(x) = ax^2 + bx + c$$

This is an align environment.

───── Short line before display (different result) ─────

Lrm:

$$f(x) = ax^2 + bx + c$$

This is an equation environment.

Lrm:

$$f(x) = ax^2 + bx + c$$

This is an align environment.

Single-line alignat environment is also detected.

$$f(x) = ax^2 + bx + c$$

Multi-line alignat environment is not detected.

$$f(x) = ax^2 + bx + c$$
$$g(x) = dx^2 + ex + f$$

3 LLColonEqq

x := y	$x := y$	ng
x \coloneqq y	$x \coloneqq y$	ok
x ::= y	$x ::= y$	ng
x \Coloneqq y	$x ::= y$	ok

4 LLColonForMapping

A : B	$A : B$	ok
A \colon B	$A\colon B$	ng
f(x) : \mathbb{R}\to\mathbb{R}	$f(x) : \mathbb{R} \to \mathbb{R}$	ng
f(x) \colon \mathbb{R}\to\mathbb{R}	$f(x)\colon \mathbb{R} \to \mathbb{R}$	ok

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We detect all of : in the following

Here are examples of colons we detect.

- $X : Y \to Z$,

- $X : Y \mapsto Z.$,

- $X : \mathbb{R}^{n^2+2n+1} \to \mathbb{R}$

and

$$X : (Y \text{ at new line in tex file}) \to (Z \text{ at new line in tex file}). \tag{1}$$

We do NOT detect any of : in the following

Here are examples of ':' we do not detect.

- $X\colon Y \to Z$, the correct use of colon.

- $A : B : C = 1 : 2 : 3$, the colon for ratio.

- $A : B = 1 : 2$ and $\alpha \to \beta$, separated by dollar sign.

- f : (some very very very very very long long long long words) $\to \mathbb{R}$, the false negative.

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5 LLCref

Theorem 1. *This is a sample theorem.*

Use **??** with cref instead of Theorem **??** with ref to avoid mistakes.

6 LLDoubleQuotation

Use "XXX" instead of "XXX" or "XXX".

7 LLENDash

- Erdos-Renyi (random graph, Erdős–Rényi)

- Einstein-Podolsky-Rosen (quantum physics, Einstein–Podolsky–Rosen)

- Fruchterman-Reingold (graph drawing, Fruchterman–Reingold)

- Gauss-Legendre (numerical integration, Gauss–Legendre)

- Gibbs-Helmholtz (thermodynamics, Gibbs–Helmholtz)

- Karush-Kuhn-Tucker (optimization, Karush–Kuhn–Tucker)

Exception: Fritz-John (optimization, name of a person)
False Positive: Wrong-Example

8 LLEqnarray

We should not use eqnarray. It has some spacing issues.

$$x = y \tag{2}$$
$$a = b \tag{3}$$

9 LLLlGg

n \ll m	$n \ll m$	ok
n << m	$n << m$	ng

I like human $<<<$ cat $<<<<<<<<<<<<<<<<$ dog.

10 LLRefEq

To refer to the equation, use (??) with eqref instead of (??) with ref.
You can avoid the mistakes of forgetting to add parentheses.

11 LLSharp

\#	$\#A$	ok
\sharp	$\sharp A$	ng

12   LLNonASCII

The following line contains non-ASCII characters.

upLaTeX
(You can write Japanese sentences as usual with upLaTeX.)

13   LLSI

Example: 10 KB, 3.5MiB, 500 GB.
Some Awesome Command.This is not ExaByte..
This 1EB is one ExaByte.

14   LLT

$$X^T \quad X^\top \quad X^\mathsf{T}$$

15   LLTitle

15.1   non title case words

15.1.1   This Is a Correct Title

SubParagraph: Test With Ref ??

16   LLUserDefined

You can define your own rule, such as prohibiting the use of a fˆa.

$$f^a(X) \quad f^\mathrm{a}(X)$$