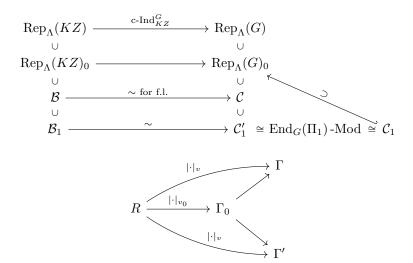# LaTeX TEMPLATE

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CONTENTS

1. INTRODUCTION

This is a document for beginning with ease. Sometimes I felt disturbed by the structures of the LaTeX document. I don't know how to reset the arranges among paragraphs, and some environments crash with each other.

Rep Irr Π Char WDrep $\mathcal{A}_{\mathrm{cusp}}$

The structure of documents:

(1) document class;
(2) packages;
(3) symbols, containing math operators and other symbols;
(4) global settings;
(5) blocks for special features;

$$
\begin{array}{ccc}
\mathrm{Rep}_\Lambda(KZ) & \xrightarrow{\ \text{c-Ind}_{KZ}^G\ } & \mathrm{Rep}_\Lambda(G) \\
\cup & & \cup \\
\mathrm{Rep}_\Lambda(KZ)_0 & \longrightarrow & \mathrm{Rep}_\Lambda(G)_0 \\
\cup & & \cup \\
\mathcal{B} & \xrightarrow{\ \sim \text{ for f.l.}\ } & \mathcal{C} \\
\cup & & \cup \\
\mathcal{B}_1 & \xrightarrow{\quad\sim\quad} & \mathcal{C}_1' \ \cong \mathrm{End}_G(\Pi_1)\text{-Mod} \ \cong \mathcal{C}_1
\end{array}
$$

$$
\begin{array}{ccc}
 & \xrightarrow{\ |\cdot|_v\ } & \Gamma \\
R & \xrightarrow{\ |\cdot|_{v_0}\ } & \Gamma_0 \\
 & \xrightarrow{\ |\cdot|_v\ } & \Gamma'
\end{array}
$$

M	$M(1)$	$M(2)$	$M(3)$	$M(4)$	$M(5)$	$M(6)$	*OEIS*
$\mathcal{C}\mathrm{om}$	1	1	1	1	1	1	
$\mathcal{A}\mathrm{ss}$	1	2	6	24	120	720	
$\mathcal{L}\mathrm{ie}$	1	1	2	6	24	120	
$\mathcal{T}(E_{\mathcal{C}\mathrm{om}})$	1	1	3	15	105	945	A001147
$\mathcal{T}(E_{\mathcal{A}\mathrm{ss}})$	1	2	12	120	1680	30240	A001813
$\mathcal{T}(E_{\mathcal{L}\mathrm{ie}})$	1	1	3	15	105	945	A001147
$(R_{\mathcal{C}\mathrm{om}})$	0	0	2	14	104	944	
$(R_{\mathcal{A}\mathrm{ss}})$	0	0	6	96	1560	29520	
$(R_{\mathcal{A}\mathrm{ss}})$	0	0	1	9	81	825	
$\mathcal{E}\mathrm{nd}_{\mathbb{C}^k}$	k^2	$2k^2$	$3k^2$	$4k^2$	$5k^2$	$6k^2$	
$\mathcal{C}\mathrm{om} \circ \mathcal{L}\mathrm{ie}$							
$\vdots$							

2. Examples

2.1. **Theorem environment.**

Theorem 2.1 (see [2, Theorem 18.5.1])**.**   ...

Setting 2.2.   ...

Definition 2.3.   ...

Lemma 2.4.   ...

Proposition 2.5.   ...

Corollary 2.6.   ...

Conjecture 2.7.   ...

Claim 2.8.   ...

Example 2.9.   ...

Exercise 2.10.   ...

Fact 2.11.   ...

Question 2.12.   ...

Warning 2.13.   ...

Black box.   ...

Conventions and Notations.   ...

Remark 2.14.   ...

Remarks.
  1. ...
  2. ...

References

[1] Jens Niklas Eberhardt. *K*-motives and Koszul duality. *Bulletin of the London Mathematical Society*, 54(6):2232–2253, 2022.

[2] Ravi Vakil. The rising sea: Foundations of algebraic geometry. *preprint*, 2017.

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