Abstract. Abstract goes here.

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1. Introduction

The introduction goes here.

1.1. First subsection

Now do some math. First, a numbered equation:

\[
\left( \frac{x}{a} \right)^2 + \left( \frac{y}{b} \right)^2 = 1. \tag{1.1}
\]

Now, equation (1.1) is the equation for an ellipse. A circle is described if \( a = b \), and a hyperbola is described if (1.1) is replaced by

\[
\left( \frac{x}{a} \right)^2 - \left( \frac{y}{b} \right)^2 = \pm 1.
\]

Now state a theorem:

**Theorem 1.1** (Cool Result). *Math is fun.*

2. A new section

Much of this motivational discussion . . . .