Linear algebra ontology

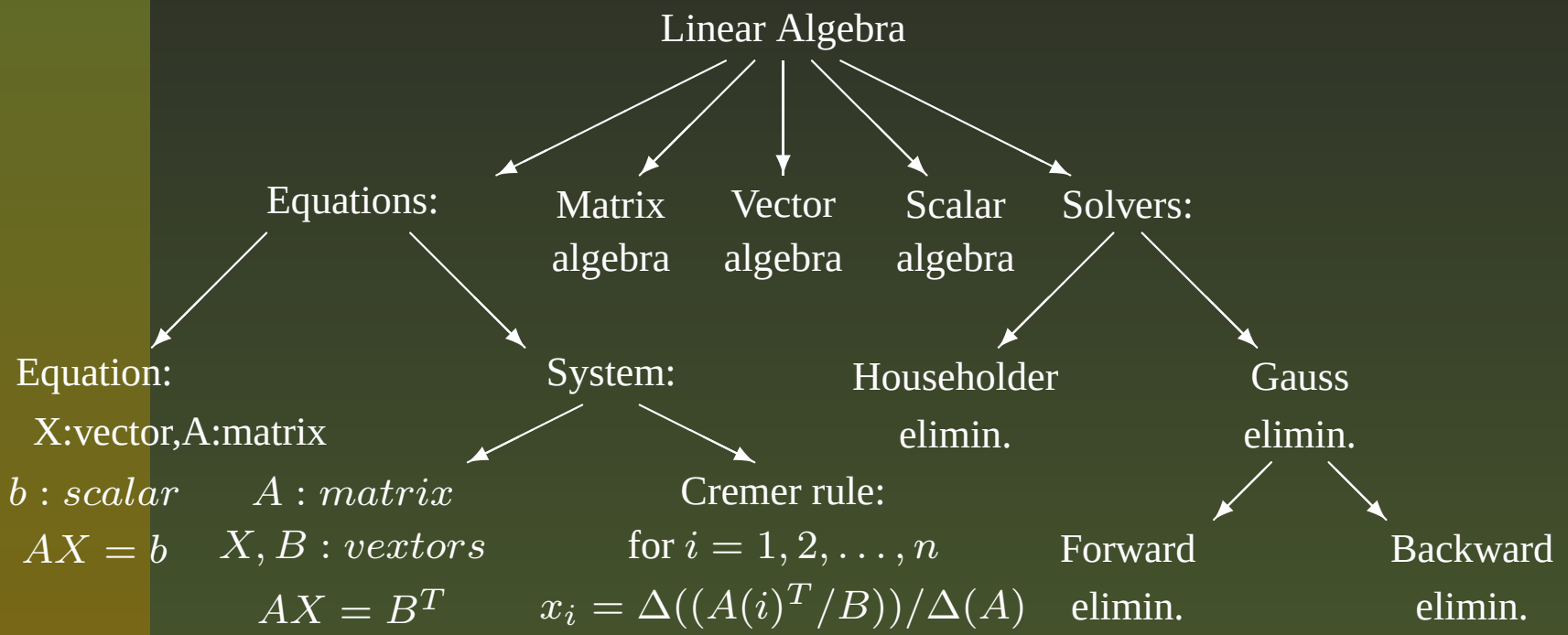

Figure 1: A fragment of linear algebra ontology

Matrix algebra ontology

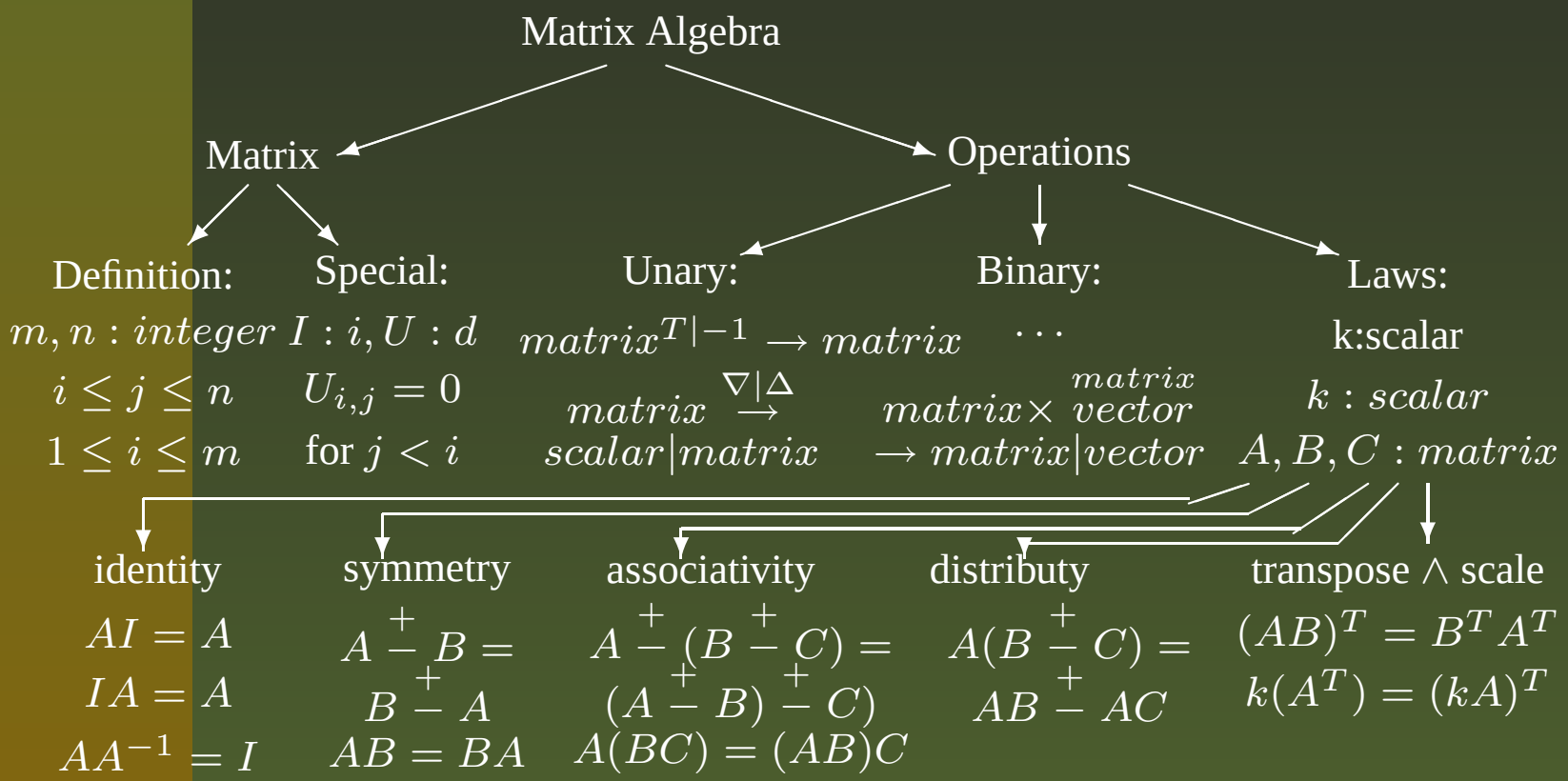

Figure 2: A fragment of matrix algebra ontology

Vector algebra ontology

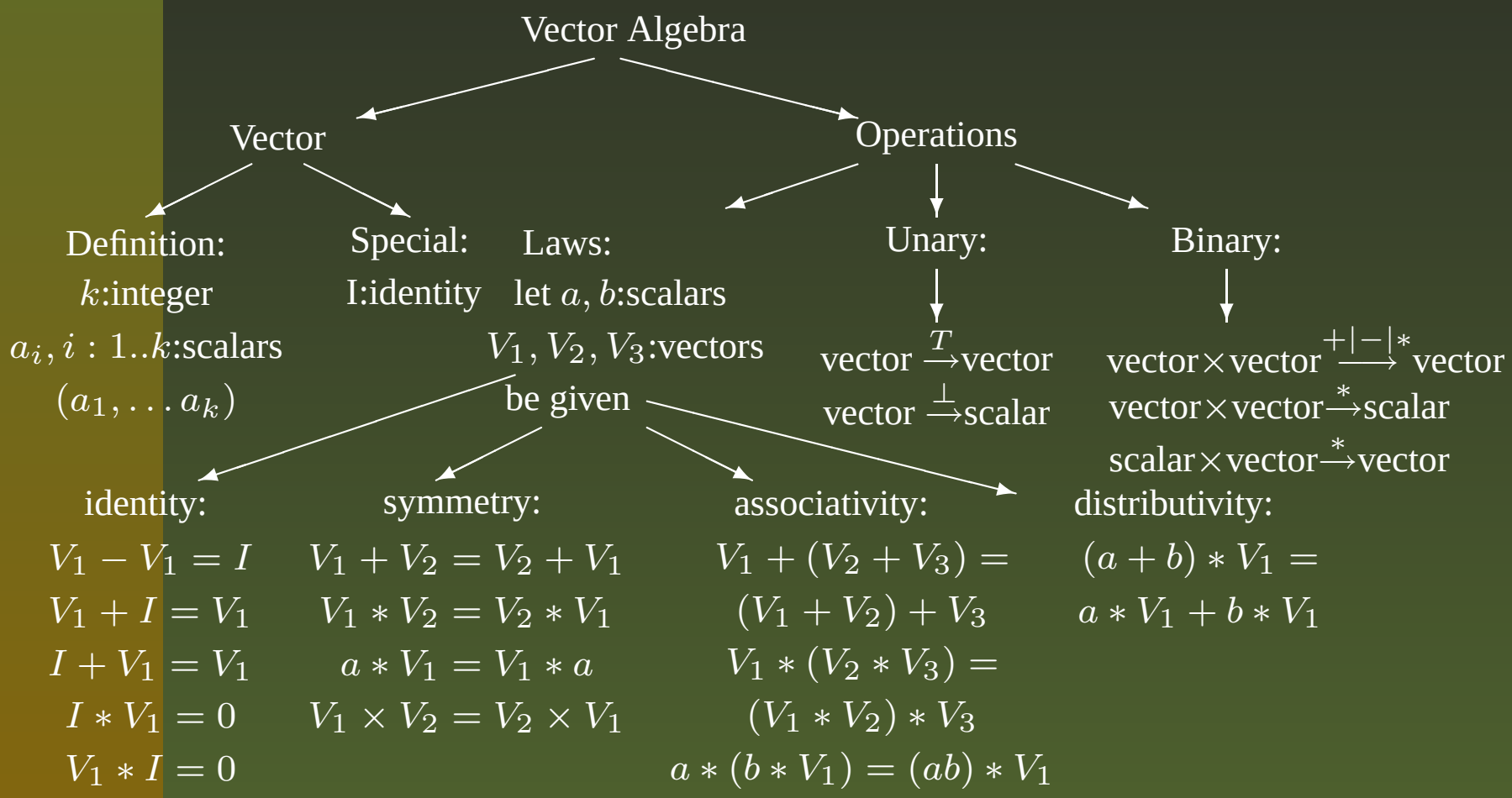

Figure 3: A fragment of a vector algebra ontology

Gausian elimination algorithm

```
Gaussian Elimination:
  Input: {Matrix A, Vector B}
  Output: Vector X
    M := Concatenate (A, B)
    F := FowardElimination (M)
    X := BackwardElimination (F)
```

SADL expression

```
<?xml version="1.0" ?>
<sadl>
  <system name="URI(Gausian)"input="URI(A) URI(B)"output="URI(X)">
    <component name="URI(Cat)"input="URI(A) URI(B)"output="URI(M)"/>
    <component name="URI(Forward)"input="URI(M)"output="URI(F)"/>
    <component name="URI(Backward)"input="URI(F)"output="URI(X)"/>
  </system>
</sadl>
```