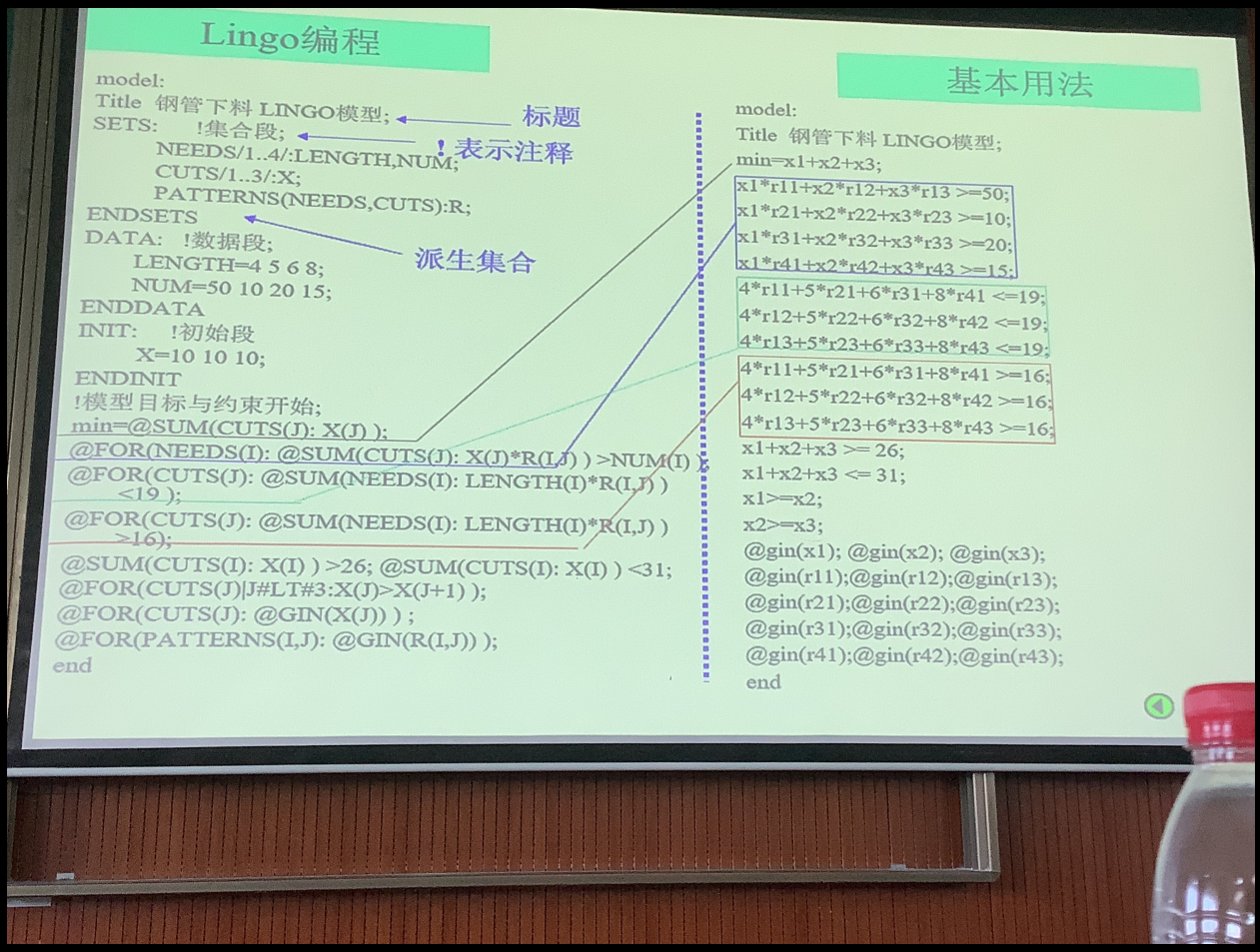
Lingo编程
model:
Title 钢管下料 LINGO模型;
SETS: !集合段;
NEEDS/1..4/:LENGTH,NUM;
CUTS/1..3/:X;
PATTERNS(NEEDS,CUTS):R;
ENDSETS
DATA: !数据段;
LENGTH=4 5 6 8;
NUM=50 10 20 15;
ENDDATA
INIT: !初始段
X=10 10 10;
ENDINIT
!模型目标与约束开始;
min=@SUM(CUTS(J): X(J));
@FOR(NEEDS(I): @SUM(CUTS(J): X(J)*R(I,J)) >NUM(I));
@FOR(CUTS(J): @SUM(NEEDS(I): LENGTH(I)*R(I,J))
<19);
@FOR(CUTS(J): @SUM(NEEDS(I): LENGTH(I)*R(I,J))
>16);
@SUM(CUTS(I): X(I)) >26; @SUM(CUTS(I): X(I)) <31;
@FOR(CUTS(J)|J#LT#3:X(J)>X(J+1));
@FOR(CUTS(J): @GIN(X(J))) ;
@FOR(PATTERNS(I,J): @GIN(R(I,J)));
end
标题
!表示注释
派生集合
基本用法
model:
Title 钢管下料 LINGO模型;
min=x1+x2+x3;
x1*r11+x2*r12+x3*r13 >=50;
x1*r21+x2*r22+x3*r23 >=10;
x1*r31+x2*r32+x3*r33 >=20;
x1*r41+x2*r42+x3*r43 >=15;
4*r11+5*r21+6*r31+8*r41 <=19;
4*r12+5*r22+6*r32+8*r42 <=19;
4*r13+5*r23+6*r33+8*r43 <=19;
4*r11+5*r21+6*r31+8*r41 >=16;
4*r12+5*r22+6*r32+8*r42 >=16;
4*r13+5*r23+6*r33+8*r43 >=16;
x1+x2+x3 >= 26;
x1+x2+x3 <= 31;
x1>=x2;
x2>=x3;
@gin(x1); @gin(x2); @gin(x3);
@gin(r11);@gin(r12);@gin(r13);
@gin(r21);@gin(r22);@gin(r23);
@gin(r31);@gin(r32);@gin(r33);
@gin(r41);@gin(r42);@gin(r43);
end