$\mathcal{A}$	set of events in Ω
$G^L_{\mathcal{A}}$	dependency graph of $\mathcal{A}$ in the sense of Lovasz as you all know it.
Ω	$=\prod_{P\in\mathcal{P}} P$ (prob. space is product of coordinates)
$P\in\mathcal{P}$	**coordinate** in Ω
$\mathrm{coor}(A)$	each $A\in\mathcal{A}$ depends on some unique minimal subset $\mathrm{coor}(A)\subseteq\mathcal{P}$ of coordinates
$G=G_{\mathcal{A}}$	**dependency graph** of $\mathcal{A}$ in the sense of Moser: $A\neq B\in\mathcal{A}$ forms an edge ($\mathrm{coor}(A)$ intersects $\mathrm{coor}(B)$)
$\Gamma(A)^+$	$=\Gamma_{\mathcal{A}}(A)^+$ **neighborhood** of A in $G_{\mathcal{A}}$(including A)

Algorithm

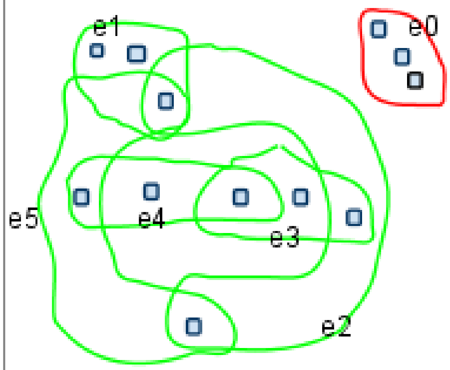
For all $P\in\mathcal{P}$ i:=0
  $v_P \leftarrow$ a random evaluation of P
While $\exists A\in\mathcal{A}$: A is violated when $(P=v_P : \forall P\in\mathcal{P})$
  Pick an arbitrary violated event $A\in\mathcal{A}$ C(i):=A; i:=i+1
  For all $P\in$ coor(A)
    $v_P \leftarrow$ a new random evaluation of P
Return $(v_P)_{\forall P\in\mathcal{P}}$

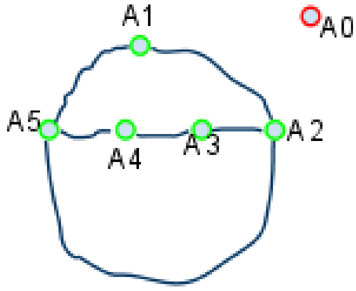
Theorem

If there exists an assignment of reals $x:\mathcal{A}\to(0,1)$ such that

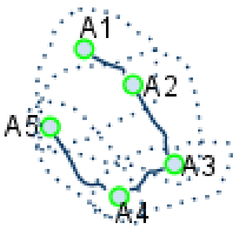
$$\forall A\in\mathcal{A} : Pr[A]\leq x(A)\prod_{B\in\Gamma(A)}(1-x(B)),$$

then the algorithm terminates after resampling each event A an expected $x(A)/(1-x(A))$ times. The total number of resampling steps is $\sum_{A\in\mathcal{A}}\frac{x(A)}{1-x(A)}$.





C(1)=A0
C(2)=A1
C(3)=A2
C(4)=A5
C(5)=A3
C(6)=A4



C	**log of execution**: $=C:N\to\mathcal{P}$ is sequence of resampled events in their order in execution of the algorithm.
τ	**witness tree**: $=(T,\sigma_T)$ is a finite rooted tree with labeling $\sigma_T:V(T)\to\mathcal{A}$ of its vertices such that children of a vertex $u\in V(T)$ receive labels from $\Gamma^+(\sigma_T(u))$.
$[v]$	Shortcuts: $[v]:=\sigma_T(v)$ and rather obviously $V(\tau):=V(T)$
	If distinct children of the same vertex receive distinct labels, we call the tree **proper**.
$\tau_C(t)$	a witness tree associated with resampling step t. It is defined as $\tau^{(1)}_C(t)$, which we get backward-inductively as follows:
$\tau^{(t)}_C(t)$	is defined as isolated root labeled $C(t)$.

$\tau_C^{(i)}(t)$	construct from $\tau_C^{(i+1)}(t)$: select any $v \in \tau_C^{(i+1)}(t)$ such that $[v] \in \Gamma^+(C(i))$ with maximal distance from the root. Attach a new child u labelled $C(i)$ to the vertex v. If no such v exists, $\tau_C^{(i)}(t) := \tau_C^{(i+1)}(t)$.