3-COL WORKFLOW

This is a hand-drawn workflow diagram. The visible labels include:

- **Graph** [9] → **Graph Viz** [17] → Graph
- **3-col constraints** [14] → (gear node) → [18] → **Coloring 1** ... **Coloring k** → **Coloring Viz** [26] → Graph-colorings
- "These seem to be equivalent results. How to group them?"
- #colors = used → [28] → **Group-by #colors view** [29/30]
- **Print DB** → Coloring DB
- colors → coloring using 2 colors
- colors → coloring using 3 colors
- "clear groups, but further symmetries exist."
- **Color Viz** [31-32] → coloring w/ 2 colors viz, coloring w/ 3 colors viz
- **Symmetric Diff Size** [35] → **Dist. Matrix Colorings**
  - **Heatmap Viz** [36] → Heatmap
  - **Dendrogram Viz** [37] → Dendrogram
  - "No clear, useful structure" "Need to account for symmetry"
- **#colors, used diff** [88] → **Dist. Matrix Colorings**
  - **Heatmap Viz** [89] → Heatmap
  - **Dendrogram Viz** [90] → Dendrogram
  - "This clear groups C_2 & C_3" "But C_2 seem to have further sub-structure"
- **Color→Pattern Map** [41] → **Coloring→Pattern Map** → **Pattern Distance** [43] → **Pattern-based Dist. Matrix**
  - **Heatmap Viz** → Heatmap
  - **Dendrogram Viz** → Dendrogram
- (n choose 2) → ((0,0), (1,1)), ((0,1)), ((0,0))
- **Coloring Equivalence Check** [66] → (gear node) → [49] → **IS/ISN'T EQUIV PW_i, PW_j** ... **IS/ISN'T EQUIV PW_{i+1}, PW_n** ... **IS/ISN'T EQUIV $PW_{i,j}$**
- **Combine** [49] → **Distance Matrix**
  - **Heatmap Viz** [70] → Heatmap
  - **Dendrogram Viz** [71] → Dendrogram
  - "All symmetries captured & grouped as desired!"